



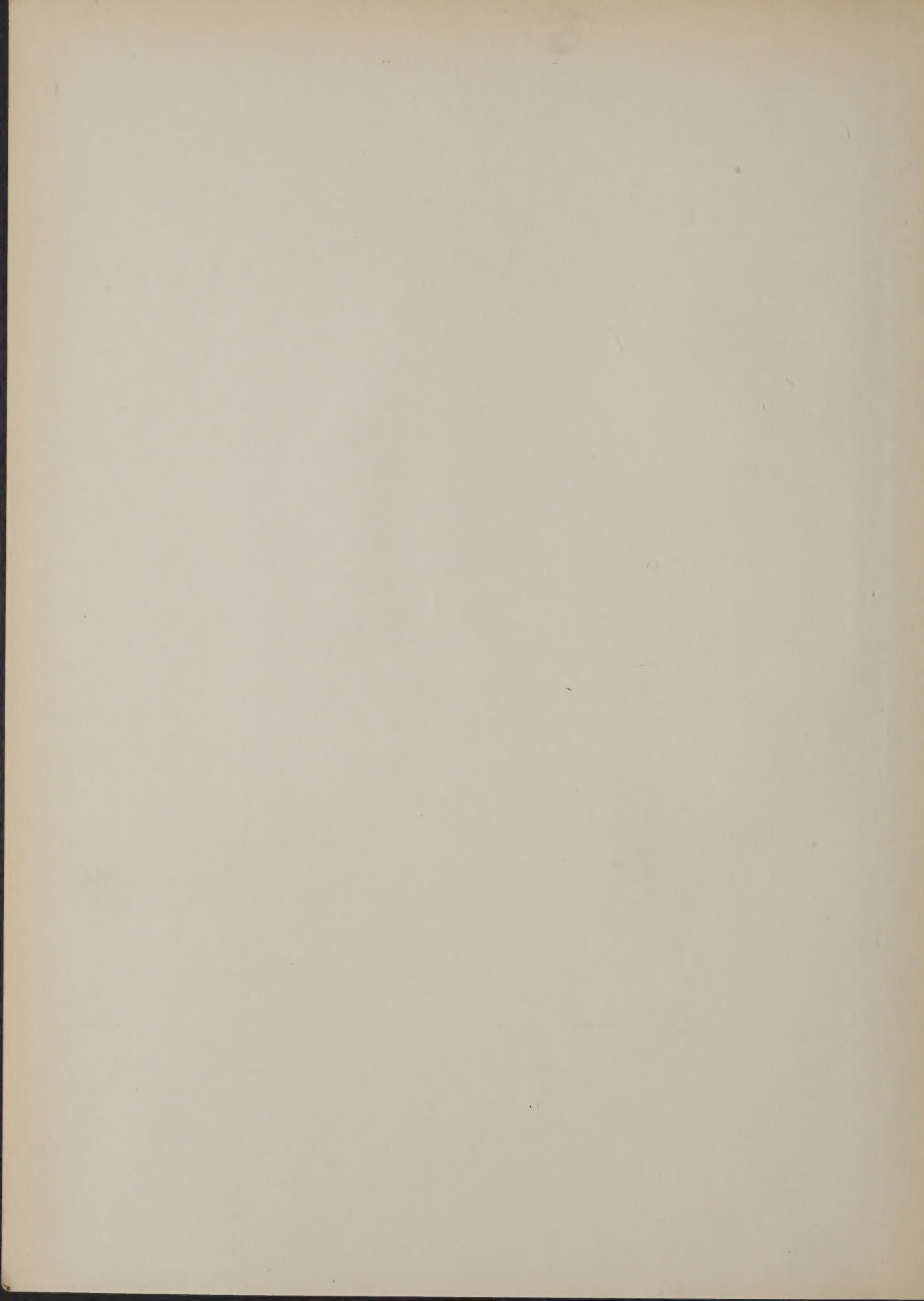


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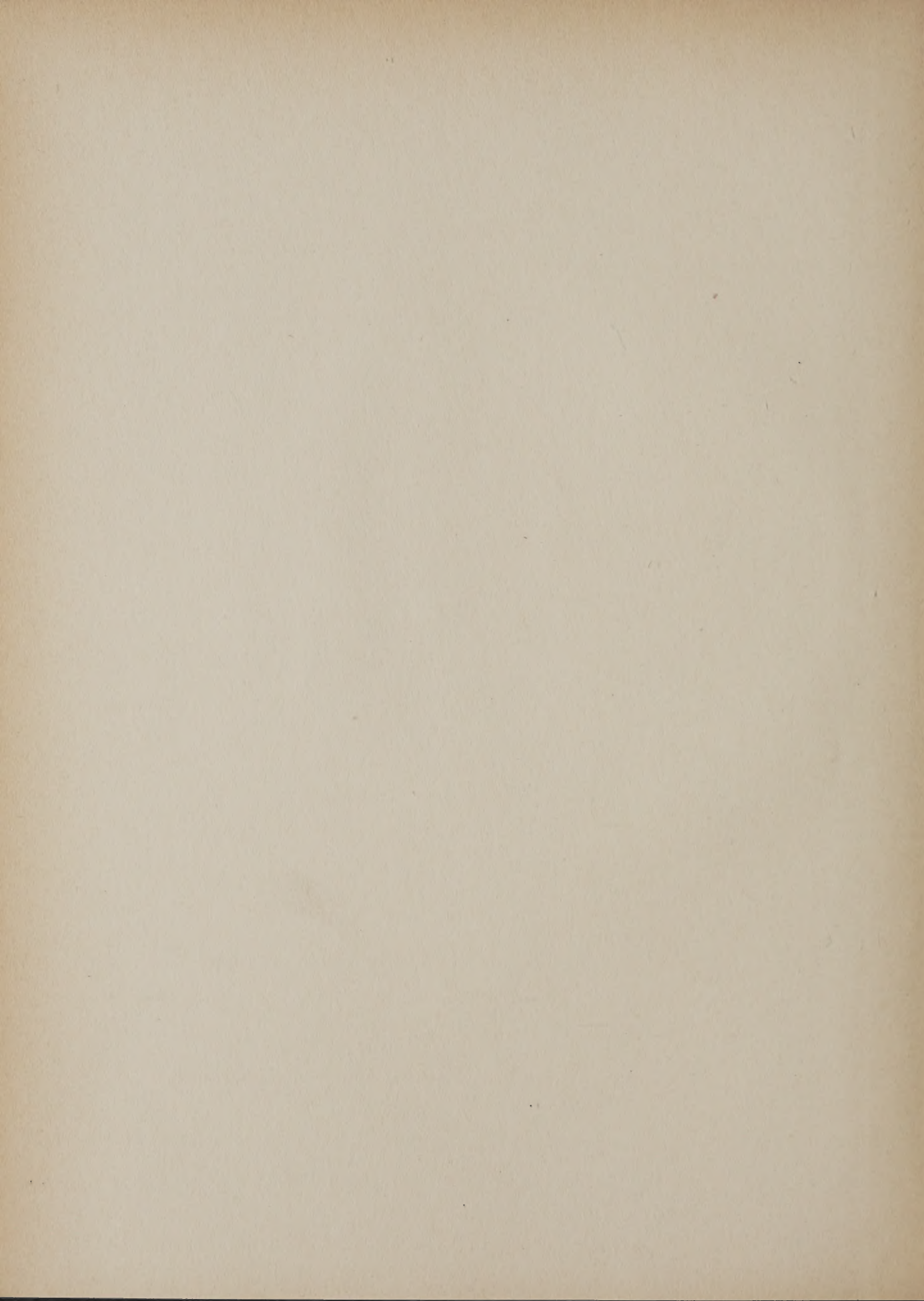


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THE EXCAVATIONS AT  
DURA-EUROPOS









RECONSTRUCTION OF THE PAINTED PANEL OF VICTORY  
(PAINTED BY MISS LOIS NORTH)



THE  
Excavations at Dura-Europos

CONDUCTED BY  
YALE UNIVERSITY AND THE FRENCH ACADEMY  
OF INSCRIPTIONS AND LETTERS

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Preliminary Report of Second Season of Work  
October 1928—April 1929

EDITED BY

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JAN 20 1931



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## PREFACE

YALE UNIVERSITY, in coöperation with the French Academy of Inscriptions and Letters, has continued the exploration of the ruins of Dura-Europos in northern Syria on the Euphrates under the directorship of M. Maurice Pillet, the distinguished French architect and archaeologist. The Syrian Government has again given its help to these excavations and the French Government, in its exercise of the Syrian Mandate, has continued to offer invaluable assistance. We take this occasion to express to them our deep gratitude.

We are also under great obligation to the Haut Commissaire de la Syrie et du Liban, the General Commandant Supérieur des Troupes du Levant, the General Commandant des Régions Nord de la Syrie, and the Directeur du Service des Antiquités de la Syrie et du Liban, M. Ch. Virolleaud. We are indebted also to M. H. Seyrig, who amid the many pressing duties of his office kindly consented to visit the site and lend us the benefit of his knowledge and experience in the interpretation of some of the remains. May we express also special thanks to M. R. Dussaud, who has untiringly seconded our efforts and who on the occasion of his visit to Syria, and in particular to Dura, was of incalculable aid to the work of the expedition?

It is a pleasure to acknowledge our indebtedness to the French authorities and to the Government of Syria in Damascus for the unfailing sympathy and consideration they have shown toward the work of the excavations. Half of the objects which fell to Syria, such as pottery, etc., were left in Aleppo; the other half, such as jewelry, a bronze plate, etc., were brought to Beirut for division, whence they were to be sent to Damascus. M. Virolleaud, at that time director of antiquities in Syria with headquarters in Beirut, was untiring in his efforts to expedite the final details of the arrangements for the division of finds and to him our special thanks are due. Furthermore, it is a pleasant duty to thank the American University at Beirut for its hospitality and willingness to aid us on all occasions.

M. J. Darrous, in charge of antiquities in northern Syria at Aleppo, was most generous in assisting at the beginning of the campaign and aiding in the transfer of materials through Aleppo. It was with the deepest regret that we learned of his sudden death last May. We take

this occasion to express our indebtedness and our sorrow at the loss of a kind friend and an able archaeologist.

In this country we are especially indebted to scholars in the Museum of the University of Pennsylvania and the Metropolitan Museum of Art, New York. The Parthian collection from Nippur in the Museum of the University of Pennsylvania which contains many parallels to Parthian finds from Dura was made available to us through the kindness of Mr. Horace Jayne, Director of the Museum, and of Dr. Leon Legrain, whose wide learning and interest were of the utmost assistance in preparing our material for publication. To the Metropolitan Museum of Art, New York, is due much of the success of our exhibition of finds in the Yale Art Museum, for it was through their officers that members of our staff received instruction which enabled them to piece together and preserve successfully some of the objects there displayed. Particular thanks are due to Mr. L. S. Bull, through whose good offices methods of repairing pottery were learned and who superintended the cleansing of the panel-picture, and to Miss Gisela M. A. Richter and Miss Christine Alexander whose generous help, extended to Miss North in her study of ancient painting, made possible an accurate reproduction of the picture of Victory.

To Dean Meeks and to Mr. Sizer as well as to their assistants in the Yale Gallery of Fine Arts our most sincere thanks are due. Needless to say, without their help we should have had neither place to study adequately the material nor opportunity to present it in exhibition. Their unfailing interest, sympathy, and enthusiasm were of the greatest possible help in preparing the finds for exhibition as well as in arranging them for publication. Professor R. G. Eberhard spared no pains in making a cast from the plaster mold, and Mr. D. V. Thompson, Jr., of the Yale School of Fine Arts by his careful microscopic examination of the panel painting made possible an exact copy of details.

Dr. Lillian M. Wilson was kind enough to undertake the publication of the textiles for this preliminary report and to prepare them for exhibition. Our thanks are due also to Mrs. Alfred Bellinger, who cleaned the coins, to Mrs. Clark Hopkins, who prepared them for exhibition, and to Miss Mary Nettleton, who reconstructed the shield.

Special assistance in the publication of Iranian names and inscriptions was given by Professor Louis H. Gray of the Department of Indo-Iranian Languages in Columbia University, and in the publication of



Semitic names by Professor W. F. Albright of Johns Hopkins University, Professor C. C. Torrey, and Professor Carl H. Kraeling of Yale. Through the help of Professor Ernest W. Brown and Dr. Dirk Brouwer of the Department of Astronomy the technical calculations of the horoscope were completed. To all these we express our sincere thanks.

Among the papers in the present volume the general report by M. Pillet was written in French and translated into English.

P. V. C. B.

M. I. R.

New Haven, Connecticut,

May 12, 1930.



# I

## GENERAL REPORT ON THE CAMPAIGN

October 1928–April 1929

BY M. PILLET, FIELD DIRECTOR

### I. THE ORGANIZATION OF THE EXPEDITION

THE expedition to Dura-Europos was during this season composed of Mr. Clark Hopkins, of Yale University, first scientific assistant, and Mrs. Hopkins, Mr. Jotham Johnson, a graduate student of Yale University, scientific assistant, and M. Serge Dairaines, secretary. In Syria I was able to secure the services of Victor Assal, first native overseer, Abdul Messiah Taza, overseer, and Phares, foreman, who in their several ways rendered useful service to the expedition.

Having arrived at Beirut on the *Lotus* on October 1, 1928, in company with Mr. Johnson and M. S. Dairaines, we were joined there the same day by Mr. and Mrs. Hopkins, who arrived from Aleppo.

Various matters, above all repairs on the Ford automobile belonging to the mission and the search for a chauffeur, detained us at Beirut until October 10. On the following evening we were in Aleppo, which we left on the fifteenth with a new chauffeur; and we reached Deir-ez-Zor the same evening.

The baggage, provisions, camping equipment, and narrow-gauge railway did not arrive at Salihyeh, however, until the morning of October 20, the *camions* on which they were loaded having been stuck in the sand several times on the way, particularly two whole days near Meyadine.

To organize the camp, arrange the material, and recruit a force of workmen occupied us four days, and the following day, October 25, the trenches were opened. Workmen were plentiful during three months (mid-November to mid-February) but on the contrary they were scarce and difficult to obtain at the beginning and end of the excavations, for the semi-nomads stay on the banks of the Euphrates only during the winter. To find pasturage for their flocks they are obliged to travel the rest of the time, leaving the cultivation of the fields to a small number of old men and children. No allurements of gain can compete with these two necessities of life: their harvests and their flocks. This lack of workmen is particularly unfortunate at the beginning of the work, when a



great quantity of fill must be removed before reaching an archaeological stratum. There is, then, no advantage in beginning excavations before they return from their migrations. At the end of our stay, Ramadan, the Mohammedan month of fasting which began on February 11, prematurely reduced our effective force.

We ourselves and our staff were lodged in tents until February 22, 1929, the date of the formal occupation of the house of the excavation. After long discussions with several contractors this was begun on November 3, 1928, by George Rezniottopoulo, of Deir-ez-Zor. It includes eleven principal rooms of which five are bedrooms, annexes, and, in a walled court, three storerooms for antiquities, a garage, and a small storeroom for gasoline and tools. The finished house, simple but spacious, will conveniently shelter the *matériel*, the library, and the finds; it will also facilitate our work.

The year was a test of the advantages of a winter season, and it can be said that it is the best in this region. In fact, we suffered none of the painful sandstorms to which I was exposed in the spring of 1928. They started again only in February and were not troublesome until the end of March.

The rains helped rather than hindered the work, laying the dust which is blinding the rest of the year and permitting the marking of the traces of buried walls, of which the most important were those of the upper citadel, for which I had searched in vain on the dry soil in spring and autumn. Shortly after the first rains they stood out clearly. The rains were intermittent, and only rarely stopped excavations, except in February. The earth was quickly dried by the wind which usually follows them and has no other inconvenience than to make the cold rather painful.

Although the thankless task of overseeing the excavations and the *matériel* was shared by all, Mr. Clark Hopkins gave special attention to the excavation of the Temple of the Roman Archers, the Northwest Baths, and the Tower of the Palmyrene Gods. Mrs. Hopkins gave him active assistance, at the same time having charge of the details of the camp. Mr. J. Johnson supervised the work at the Palmyrene Gate and copied the inscriptions which cover its walls, as well as the numerous graffiti on the walls of the private houses of the city, dug previously. M. S. Dairaines occupied himself with the complicated provisioning of the expedition, as well as the correspondence, the accounts, and the photography.

To hasten the division and shipment of the antiquities found during these two campaigns of excavations, Mr. and Mrs. Hopkins, accompanied by Mr. Johnson, left Salihyeh on March 10, the day after the arrival of M. R. Dussaud, representative of the Académie des Inscriptions et Belles-Lettres for this season.

Mr. Hopkins took charge of the division, packing, and shipment of the antiquities; on April 12 he left Beirut, the day after the *Asia* of the Fabre Line, carrying the antiquities which fell to Yale University in the division, had sailed.

The excavations were closed the evening of March 31 and I left Salihyeh on April 2 with M. S. Dairaines, after putting the *matériel* in good order and closing the house. On April 12 I embarked for France, reaching Paris April 19, seven months after my departure.

This season was rich in discoveries, and no serious incident came to trouble it. However, at the time of my departure, the situation among the desert tribes was uncertain, the S'bas and the Rualas having declared war over pasturage rights. In April and May the Euphrates flood was so extensive that the river spread over the valley to a width of ten or twelve kilometers, carrying away villages, crops, and roads. The lower part of Deir-ez-Zor and the island were wiped out by the current; the roads from Salihyeh to Deir and to Abu Kemal were broken for more than a month, isolating our site completely.

## II. RESULTS OF THE EXCAVATIONS

### 1. *General Survey.*

The excavations of this season (Pl. XXIX) have furnished important material for the knowledge of the site of Dura and its history. As for the uncovered objects, they were many and varied: pottery and glass ware, small bronzes and paintings on wood, cloth and armor, parchments, a papyrus, coins, and jewels are among the finds which will permit us to reconstruct little by little the life of this city.

The complete excavation of the Palmyrene Gate was carried out, as well as the excavation of the Tower and the Temple of the Palmyrene Gods, but in addition three new buildings have been disclosed; one, dating from the earliest occupation of Dura, is represented by the ruins of two successive citadels raised on the rocky crest dominating the Euphrates and the city; the other two, of Roman times, are a small shrine built by the troops of the occupation and the Baths.

Four important inscriptions were discovered: a votive altar erected by a certain Scribonios, a stele of Zenocrates going back to 51 A.D., most important of all, one mentioning the earthquake of 160 A.D., which destroyed the city, and finally the dedication of the altar set up in a new shrine built by the Roman archers of the second cohort of the Ulpian Legion.

It is necessary to add here the discovery of three parchments, of which one, of 21 lines, is almost intact; its decipherment is entrusted to Yale and it seems to be a document of the highest importance for understanding the commercial relations of Dura in the Parthian period, toward the end of the second century of our era.

The fragments of a Greek papyrus, unfortunately crushed under the weight of the stones, advises us that we may hope for new finds of this sort.

Two panels of painted wood, of which one represents a winged Victory, a fairly considerable number of pins and rings of bronze, a small cup and miscellaneous objects in the same metal, a curious swastika, lance heads, chains, and fragments of armor and shields, a quantity of cloth with geometric designs, are now deposited at Beirut and Yale, where they are being cleaned and studied. Terra cotta lamps—I found seven last year—have now reached the number of fifty, but all in the simplest style.

Remains of frescoes, unfortunately broken into fragments, have been found nearly everywhere: at the Palmyrene Gate, in the Temple of the Roman Archers, and also in the new Baths, where paintings of faces have been found, in a fairly good state of preservation.

Two discoveries of coins, one of 120 and one of 818 pieces, not badly corroded, will, when cleaned, furnish without doubt interesting information on the coinage of these countries in the second half of the third century of our era.

Finally, along with the larger hoard of coins, were found nineteen articles of jewelry in silver, for the most part intact, completing this varied assortment of finds.

## 2. *The Approaches to the City.*

The principal approach by land to the city of Dura can be considered today as clearly defined by the Triumphal Arch discussed last year<sup>1</sup>

<sup>1</sup> *The Excavations at Dura, First Season*, "General Report," pp. 6 f.



and the Palmyrene Gate; say about 1750 meters in length. It comes in from the northwest diagonally to the Gate, making an angle of  $30.5^\circ$  with the ramparts fronting the desert and  $57^\circ$  west of magnetic north.

This direction is given by the extant part of the arch of the little eastern passage of the Triumphal Arch. In addition, it is noteworthy that the ruins of four tower tombs which remain on this side of the city flank the two sides of this ancient road. A few trenches dug across this line will doubtless give us the foundations of this road.

In company with Sir Aurel Stein, the learned explorer of Chinese Turkestan, we searched in vain in January, 1929, for the traces of an ancient road leading directly from Salihyeh to Palmyra. This road must have followed the wells in the wadis or valleys to the north and south of the direct line uniting these two villages.

### 3. *The Ramparts and the Gates of the City.*

The documents so far brought to light by the excavations of Dura have not yet exactly determined the age of the ramparts of the city and its fortress; however we now have two important dates, the one putting their construction before the year 52 A.D., and the other fixing their destruction by a violent earthquake which occurred on the ninth day of Dios, early in October, 160 A.D., about ten o'clock in the morning.

On the other hand, the buildings on the upper citadel lead us to think that they should be attributed rather to the Seleucid period than to the Parthian, because they offer no point of comparison with buildings such as those of Hatra, for example.

The date of the dismantling of the place, furnished by the stele of the Tower of the Palmyrene Gods, explains the peculiarities of destruction observable on the monuments: corners are torn loose, towers have crumbled upon themselves and curious methods have been employed afterward hastily to support the tottering walls: walls of sun-dried brick duplicating the masonry as well on the outside as on the inside, or holding up the upper floors in the middle of their reach.

The Palmyrene Gate is the only known entrance along all the desert face of the wall, that is, on the west, southwest, and south faces, a distance of about  $2\frac{1}{2}$  kilometers.

A little postern built close under the eastern wall of the Tower of the Archers (No. 4 in Cumont, *Fouilles*), access to which from the north ravine was secured by a little flight of steep steps, was in fact only an inconvenient accessory gate.

On the face toward the river, to the north, the excavations of the autumn of 1928 have uncovered at the foot of the great bastion of the citadel which dominates the river on this side the northeast gate, the existence of which I surmised last spring.<sup>1</sup> Below the mass of earth and gravel carried down this ravine by the rains, we reached the level of bedrock. It is cut on a slope, descending rapidly toward the valley; by long use chariot wheels have cut two ruts there. The gate itself was vaulted in the shape of a semicircular arch, and its impost was closed by a tympanum similar to those of the doors of the citadel. Nothing remains today but the southern part of the curve, cut in the living rock. The base of the great wall, which forms a curtain toward the river and closes the ravine utilized as the road, was cut in the rock. A little stairway was built against it, in the interior of the city, climbing toward the northwest; another, of which only three steps remain, rested against the exterior of the arch of the gate and ascended toward the bastion of the citadel. A rectangular niche may have been used by the guard of the gate. In modern times the rock has been washed away to the line of the rampart and the gate opens on emptiness, with a drop of about 12 to 15 meters.

Within the city the natural walls of the ravine have been cut so as to form a sort of ditch, broad and deep, on the northwest face of the citadel.

The search for the second river gate, which is outlined in the ground to the south of the citadel<sup>2</sup> has not been undertaken during this campaign.

#### 4. *The Palmyrene Gate and Its Environs.*

The interior of the towers of the Palmyrene Gate and the immediate surroundings were completely excavated during this season.

The position of the doors with double leaves which closed the passage, in the middle (C) and toward the desert (A) is now fixed<sup>3</sup> (Pl. II). That of the door placed on the city side remains doubtful. Considered as defense, it would seem that it ought to be placed in the interior, providing the garrison of the towers with a redoubt (D) and defending it from an attack coming from the inner city. On the other hand, the plan shows rather that the door opened toward the city, at E, that is to say setting a third obstacle before an enemy coming from outside. It seems

<sup>1</sup> *Rep.* I, p. 6.

<sup>2</sup> *Ibid.*

<sup>3</sup> In the preliminary plan, published in *Rep.* I, Pl. I, pp. 10 f., the bolt was by a mistake in drawing put too far to the east.

that this was the early disposition, while in the Roman period the door on this side was no longer maintained, because the Romans built there two blocks of masonry, perhaps supporting votive altars or stelae.<sup>1</sup>

The interior of the towers is divided into two oblong rooms separated by a wall on a line with the piers of the central gate and pierced by a door 2.00 m. high (north) and 2.32 m. (south), surmounted by a triangular vault raised in successive corbels (Pl. XXXVII, 1). The walls of the ground floor of these towers are rough and unequal, while those of the upper floor are carefully finished. Also, no graffiti was discovered in the interior of the towers where it was quite dark. Only a single loop-hole opening toward the city and the door of the passageway admitted light. The loopholes are, besides, too narrow to permit the throwing of projectiles, and placed too high to see out of without the aid of a ladder. It is then quite certain that the ground floor served only as storerooms and not as a habitable guardroom.

The presence of constructions in unbaked bricks or in rubble and plaster, found equally inside the towers and outside the gate and even on the ramparts, would be difficult to explain if we did not know of the earthquake which destroyed the city in 160 A.D. After the disaster they hastily propped up whatever remained standing. In the south tower, the first room (F) had been so completely blocked by the beams of the ceilings fallen across the doorways and by the mass of stones from the upper walls, that the ancients gave up the idea of digging it out. We ourselves had long weeks of work to excavate it. The articles found on the floor level of this room, such as the shield (Pl. XXVI), two parchments, the fragments of papyrus, the pieces of leather and painted shields and a beautiful swastika, for example, are thus dated before 160 A.D.<sup>2</sup>

In room G (Pl. II), of the south tower, however, a stairway (c) was built rather clumsily of stone masonry partly supported on beams (Pl. XXXVII, 1). It furnished a means of descent into this chamber from the upper floor. A storeroom was installed there; in it clothing and remains of armor were found, also many lance heads, of which some were fresh from the forge and had not yet been pierced with the little hole through which passed the small nail fixing the head to the shaft. Two basalt hand mills for grain, of the usual shape and measurements of the Roman period<sup>3</sup> were also found there.

<sup>1</sup> *Rep.* I, Fig. 5, p. 19.

<sup>2</sup> Editorial Note: See, however, p. 151.

<sup>3</sup> R. Cagnat and V. Chapot, *Manuel d'Archéologie romaine*, I, Fig. 125, II, p. 232, Fig. 477.



In the north tower were built, within the rooms, walls of unbaked bricks, which made it possible to replace the strong beams of the upper floor by twisted and weak poles, native to the locality. In the northeast room (H), two walls of 1.12 m. and 1.30 m. in thickness, built across the room, one (e) against the wall on the city side, the other (d) in the middle of the remaining space, reduced the span of the beams to 1.90 m. and 2.30 m., while that of the earlier beams was 3.50 m. A little niche intended to accommodate a lamp and perhaps a statuette is noticed in the second wall (d). In the northwest room (I) the wall, 1.30 m. thick, is, on the other hand, placed in the middle of the room and parallel to the passage; it reduced the span of the ceiling to 1.10 m. approximately.

The discoveries made on this side are all of the Roman period, after the great earthquake. In the southeast corner of tower H were found especially the two panels of painted wood (Frontispiece, Pl. I, 1) and a small parchment in two pieces. In tower I were found a basalt mill, similar to the previous ones, several coins badly oxidized, deer (?) horns, which served as ornaments, scattered bones of gazelles and lizards, clothing and leather from soldiers' boots, shod with large nails.

### *The Neighborhood of the Gate.*

Two trenches were cut from the desert up to the foot of the walls of the desert face, in order to study these ramparts. One of the trenches was dug 15 m. south of the Gate, the other along the north tower.

This work has enabled us to ascertain that the ramparts, founded on the bedrock of the desert, were not protected by a ditch. They have today a height no greater than 8.50 m. above the rock, but the toothings are visible on the south face of the gate, and rise to 11 m.; one can estimate that the wall was originally at least 15 to 18 m. in height. These ramparts are of excellent construction, built in stone blocks in courses 0.34 m. to 0.39 m. high, except for the lowest which measures 0.54 m. The foot of the walls is protected to a height of 1.95 m. by a bank of double slope, 0.70 m. thick at the base and carried up in masonry covered with a careless coat of plaster. Piled up against the base of these walls is a deep layer of black ash in which were found several coins and small broken ornaments of bronze. Finally, though it removed all defensive value from the fortifications, the fill of ashes was supported by a sloping wall, built up of unbaked bricks, and placed 6.30 m. away from the ramparts. It is only 1.70 m. wide at the base and then becomes thinner until it has no more than one brick at the top of its slope.



The partial destruction of the walls and the fill of wind-blown sand give the whole the appearance of a low hill from which emerges a rocky line formed of stones scaled off by wind and rain.

At the northwest angle of the gate, we encountered a curious little construction (S on Pl. II), 2.57 m. wide, the stone lintel of which was broken in two. It is flanked by two small side niches which are placed behind the outer line of the Palmyrene Gate. I think that in this construction must be seen a large stele, painted no doubt on a coat of plaster which has now disappeared, where travelers leaving or entering the city could offer their devotions to the tutelary divinities.<sup>1</sup>

Within the city the base of the towers is as encumbered with masses of unbaked brick as the interior of its rooms. They were unexplainable before the discovery of the stele of 160 A.D., and forced the excavations to proceed very slowly, for I did not wish to destroy these traces of antiquity, usually important and difficult to clear.

At the foot of the south tower the clearing away of the mass of gravel, *débris* of plaster, and mud bricks was abandoned after several weeks of work, having produced nothing. At the foot of the north tower was found a little stairway of six steps, intact, covered with a fine layer of plaster (Pl. XXXVIII, 1).

### *The Main Street of the City.*

The main street which ends at the Palmyrene Gate was opened by two trenches, which laid bare the façades of the houses and the openings of the cross streets. These trenches, which went down to the ancient level of 1.80 m. in depth, were continued to a length of 140 m.

It is noteworthy that near the Palmyrene Gate and as far as 60 m. from its interior façade the street is only 6.10 m. wide. Then it widens to 14.30 m. This arrangement is practical not only for the military defense of the place, in case the entrance of the city was forced, but also for protection from the strong wind which almost always blows in from the desert and gives the Palmyrene Gate the name by which the Arabs know it, "Bab-el-Hawa," the Gate of the Winds.

In addition to a few coins the south trench produced minor objects in bronze, considerable fragments of painted decoration, indicating an elaborate establishment which is also marked on the ground by a large pile of ruins.

<sup>1</sup> Editorial Note: For a different interpretation see below, p. 158.

On the north side can be noticed, near the Gate, another important edifice, whose entrance must open on a side street, since on the main street it shows only a portico of square masonry pillars. In the present state of the excavations one can suggest no theory relating to the purpose of this building. The little which has been cleared has given interesting results.

At first were found two chariot wheels in heavy iron, of which nothing but the rims and hubs remain, so oxidized that it was necessary to leave them in place (Pl. XXXVII, 2). Then, on January 26, there was found a few meters away a hoard of 818 coins in an ordinary clay jar (*Yale Bull.*, February, 1930, p. 83, Fig. 10), above which were fourteen intact objects of silver jewelry and four more in fragmentary condition (Pl. XV and Pls. XLIV–XLVI).

The coins, very well preserved, turned out, after superficial cleaning, to be Roman, dating from the second half of the third century A.D.: Philip II, Trebonius Gallus, Valerianus, Gallienus, etc. Many are of silver, others of bronze covered with a thick coat of silver, apparently cast. Colonel Allotte de la Fuye remarks that this practice is current in the coinage of the Late Empire and in these regions of the East, Susa, Elymais and Seleucia on the Tigris.<sup>1</sup>

We had already found, on December 5, 1928, another hoard of 120 Roman coins of the same period in a small vase brought to light south of the citadel.

The silver jewelry, for the most part untouched by oxidization, seems to have constituted the complete adornment of a woman who had kept her childhood jewels. Among them are to be noticed a pendant set with small stones or bits of colored glass, in the Byzantine style, a large bracelet with a catch decorated with an agate,<sup>2</sup> two large bracelets in twisted strands of metal, with a catch, six large earrings made of a single silver wire elaborated with a coil at the end or with a pendent crescent, and finally, two expanding bracelets formed of a single wire with coils forming grooves.<sup>3</sup> They recall the similar articles in the Cairo Museum, which are of the Greco-Roman period. They can reasonably be attributed to the goldsmiths of the Delta of Egypt or of

<sup>1</sup> *Mémoires de la mission archéologique de Perse*, XX (1928), pp. 29 and 37.

<sup>2</sup> Cf. No. 52101, J. d'entrée No. 35678 of the Cairo Museum, *Cat. général*, E. Vernier, *Bijoux et orfèvreries*, fasc. 1, 1907.

<sup>3</sup> Cf. Vernier, *op. cit.*, No. 52107, J. d'entrée No. 29353 and No. 52146, J. d'entrée No. 38478.

Syria, where this art has continued to thrive until our own time, principally at Damascus.<sup>1</sup>

5. *The Tower and the Temple of the Palmyrene Gods.*

During this season the removal of the large mass of *débris* accumulated in earlier excavations before the Tower of the Palmyrene Gods and at certain points in the temple itself was a rather long task. Today all of this dirt as well as that which masked the Tower of the Archers, has been dumped into the north ravine.

The plan of the tower (Cumont, *Fouilles*, Pl. XXV) must be corrected; it is not square. In the interior the tower measures, on the ground level, 12.89 m. in depth (perpendicular to the line of the walls) and only 5.92 m. in width (north-south). The door, which opens to the east, in the corner of the Temple of the Palmyrene Gods is arched in a slight ogive, and is only 1.80 m. high.

The original ceiling beams rested at each end on a ledge 0.40 m. to 0.45 m. in width, which represented the decrease in thickness of the walls above the first floor. To hold up the new beams made of small round logs of the district, an east to west wall was built, dividing the interior of the tower in two in the direction of the depth. Under this arrangement there remain only two corridors, 2.41 m. in width. The partition wall, approximately 1.05 m. thick, is built up roughly in rubble and plaster; the ends of the beams were sealed into this.

At the eastern end of this wall, facing the door and at some distance from it, a great stele with a rounded top, built up in plaster, may have been decorated with a painting of which, however, there is no longer any trace today. A sort of basin, also made of plaster, occupies the floor space at the foot of this stele.

M. Cumont had excavated the entrance to this tower; we entirely completed the excavation to the foundations, the ancient flooring having almost entirely disappeared. The mass of stones, rushes, ceiling beams, about 4 m. in height, was covered with a large amount of *débris* from the upper part. To that we owe the discovery in the bottom of this tower of a great assortment of cloth with woven decoration, fragments of painted shields, unfortunately in bad state, several lance heads and bronze coins. Furthermore, basalt mills, one in each room, with which

<sup>1</sup> Editorial Note: Mr. Jotham Johnson discusses the jewelry below under "Minor Finds."



the garrison prepared its flour and no doubt made its bread, explains the thick layer of soot covering the lower walls of these towers. But on February 10 was found the stele mentioning the earthquake of 160 A.D., which destroyed the city. The altar erected to the Greatest Zeus was probably situated facing the above-mentioned stele, opposite the entrance door. Its presence explains the numerous graffiti, representing lions, which decorate the walls of the tower: a bounding lion (Pl. XLII, 2), a warrior fighting a lion (Pl. XLIII, 1), and above all a divinity, standing, his head surrounded with the rays of the sun and holding in each hand a lion drawn up on its hind paws (Pl. XLI, 1 detail).

Outside the tower, on its eastern front, was a small uninscribed altar topped by a small niche intended for a lamp. Scarcely 0.50 m. from it we found, on February 15, the beautiful altar (0.765 m. high and 0.37 m. wide at the base) dedicated by Scribonius Mucianus to the god Iarhibol (p. 90, Fig. 3).

The careful cleaning of the level of the great court of the temple itself enabled us to determine the entrance, situated on the east and preceded by a small portico, and to recover the fragments of a stele dedicated by Zenocrates, son of Seleucos and descendant of a Seleucos; it is dated 51/2 A.D.

A little farther on, the Tower of the Archers (No. 4, Cumont, *Fouilles*) was also cleared of the little hill of *débris* which rose before it; the drums of the columns, made of rubble and plaster, were put back into place. This clearing brought to light, at the northeast angle of the tower, a small postern with a few steps of a steep stairway, giving access to the north ravine.

## 6. *The Citadel.*

### *The Principal Gate.*

The principal gate of the citadel was doubtless that by the northwest tower (*Yale Bull.*, February, 1930, p. 77, Fig. 2). The complete clearing of its approaches shows that the outer face of the ditch served as a quarry in ancient times, probably after its abandonment as defense. The gate was approached by steps cut in the rock. In the Roman period this stairway must have disappeared under the rubbish, and the doorsill was raised about 1.20 m.

The excavation brought to light the lowest courses of the tower, untouched by weathering.



The rock on which the walls rest was uncovered and the great heap of stones which buried the angle formed by the north curtain and the bastion (No. 6, Cumont) near the Euphrates was removed; it reached a height of 10 m.

In this spot was found a great quantity of sherds, a few almost perfect jars, fragments of terra cotta lamps, an unbroken basalt millstone, a large vase in white limestone, and a few badly oxidized coins.

### *The Interior of the Northwest Tower.*

The interior of the northwest tower, excavated to the floor level of ancient times, furnished no other antique remains except tombs, apparently of the Roman period, without sepulchral furniture. However, the discovery on November 16 of the skeleton of an executed criminal, his jaws wide open, his left temple crushed in, and a slipknot twisted about his throat, was not without interest (*Yale Scientific Magazine*, Nov. 1929, p. 18, Fig. 3). This skeleton, together with the closing of the loop-hole with a heavy wall, seem to bear witness to the fight in which succumbed the garrison of the citadel, stormed by Lucius Verus.

In addition to a few unexplained symbols, which are not marks left by workmen, a few Greek inscriptions were discovered here.

### *The Upper Citadel.*

The discovery of the ruins of the central part of the citadel, perched on the rocky summit which dominates from a height of 39 m. the valley of the Euphrates, is by far the most important and unexpected architectural result of this season.

In fact, in the spring, as in the autumn of 1928, I had searched in vain on the edge of the cliff, near the "dungeon" (tower No. 10, Cumont), for traces of constructions which seemed likely to have once existed there. A few days after the winter rains began the upper citadel was covered with a fine carpet of grass, but certain paths, bare of grass, betrayed the lines of the walls beneath. My first discovery of this sort goes back to 1913, on the site of the Palace of Darius at Susa,<sup>1</sup> and since then I have profited by the experience several times in Syria and even in Egypt. On December 16 I began the excavation of these ruins, and by the end of the month fourteen rooms or corridors had been disclosed, extending to a length of 72 m. along the edge of the cliff, with a maxi-

<sup>1</sup> M. Pillet, *Le Palais de Darius*, I, 47.

mun width of 25 m. The walls are of large well-cut stones, of which only the outer courses and two others in foundations remain; in places only the latter remain.

The whole discovery, oriented almost exactly to the four cardinal points, comprises two distinct parts (Pl. IV).

To the south the first group of buildings surrounds the "dungeon"-cistern (C). It includes an entrance vestibule (A), 9.48 m. by 6.80 m., open to the south, the ceiling of which was held up by five rectangular pillars. To right and left it opened into two rooms, of which those on the east have retained their sills of hard stone, with L-shaped grooves, holes for hinges, and the usual bolts; their doors had double leaves, opening toward the interior of the rooms.

To the north a portico of three columns, the outlines of which are traced on the pavement, led from the vestibule to a large rectangular impluvium which surrounds the central cistern. The south wall of this impluvium must have measured 20.30 m., the west 22.40 m. The colonnade which supported the roof of the southwest corner was formed of nine columns, the axes of which are traced on their stylobate. A single drum remains in place, that to the west (Pl. XXXI, 2). It measures 0.61 m. in diameter and is cantwise; three Doric capitals (0.51 m. in diameter at the base) belong to this colonnade. Two channels made of stone slabs (c) run north and south, toward the central cistern. On the west side of the impluvium are grouped five rooms (B), which were decorated with paintings; of these a fairly large number of fragments were found, in blended colors, brick red, yellow, blue, and blue-black.

It is tempting to see here the palace of the governor of Dura, as was suggested to me by M. Dussaud, when he visited the site last March.

In fact, to the north of this building, separated from it by a passage 2.12 m. wide, rose a construction (D) more imposing and more massive, since the walls have an average thickness of 1.40 m., while the walls of the first building are only 0.99 m. to 1.01 m. thick. The most curious part is a very narrow corridor (0.75 m. wide) with pilasters running between two thick walls. It is certainly the southwest corner of this upper citadel, of which all the rest was hurled into the valley, doubtless at the time of the earthquake of 160.

A fairly large number of objects was discovered in the course of this excavation; terra cotta lamps, pins, rings or loops of bronze. At the southeast extremity of these ruins was found a pile of thirty-five balls of

hard stone, each weighing six to seven kilograms and roughly rounded. These are ballista projectiles, of which some examples were found also at the Palmyrene Gate.

The few silver and bronze coins which were found, in spite of the thick coat of oxidization which covers them, seem to be Macedonian or Parthian (diameter 15–16 mm.). The cleaning of these different pieces, which are today at Beirut and Yale University, will determine the probable date of these ruins, whose construction and orientation seem to date back to the Seleucid period.

In fact, the orientation of these walls is the same as that of the “dungeon”-cistern and also of the inner redoubt. It is met again in the well-built rampart found to the northwest of the great gate of the citadel, that is, making an angle of about  $45^{\circ}$  with the line of the outer walls and that of the *enceinte* wall of the citadel itself.

It seemed reasonable, then, to think that these buildings (“dungeon” and inner redoubt) were earlier than the ramparts of the citadel. However, it cannot be shown, and although the *débris* found in the upper citadel permits us to think that it may go back to the Seleucid rather than to the Parthian period, it is now established that it is later than the great outer walls of the citadel.

Attracted by a wall built of two carefully laid courses (*Yale Sc. Mag.*, Nov. 1929, p. 17, Fig. 2) which is parallel to the outer ramparts, and which, although it joins the buildings B and D of the upper citadel, does not belong to them, I resolved to clean the ground carefully to the level of the rock itself, so as to disclose the foundations of this earlier building (Pl. XXXI, 1). Thus I found a group of five rooms (E) of which the oblique wall formed a part and which the group previously found had covered. The axis and circumference of a column were traced on top of the wall, and near by was found a small arch formed of two stones resting on a mass of unbaked bricks; it seems to have formed the opening of a sewer.

My opinion is that these ruins, reduced to the merest line of the foundations, are Macedonian; the great outer walls of the citadel may be Macedonian too. In any case, we must go back here at least to the end of the third century or the beginning of the second century B.C. I hope that the continuation of the excavations will produce evidence to decide this point.<sup>1</sup>

<sup>1</sup> Ed. Note: See below, pp. 53 ff.



7. *The Temple of the Roman Archers.*

The excavations of this season attacked all the approaches of the northwest tower of the citadel for an average radius of 100 m. going from the deep trench of the previous year, which uncovered the ditch of the citadel, in the west, to the northeast breach which opens on the Euphrates.

The little hill opposite the principal gate of the citadel continued to disappoint us for a long time, for the remains were so fragmentary that it was difficult to follow the line of a wall or a pavement. To the north a cluster of Roman houses produced little: ordinary lamps in terra cotta, gaming tables cut in stone, ivory dice, a small altar in limestone decorated with geometric designs recalling the thymiaterion of the Palmyrene Gate,<sup>1</sup> miscellaneous pottery and fragments of engraved glass.

Three meters below the surface of the ground, however, was found a large wall of good construction: 1.44 m. thick and comprising nine courses, each 0.35 m. in height. It rested directly on the rock, which itself was cut to form the foundation. We were then nearly eight meters below the present ground level. This rampart, of the same character and orientation as the buildings of the second citadel mentioned above (A, B, C, D, on Pl. IV), seems to date back to the same period, near the founding of the city.

The buildings which rose on the western part of this hill, twenty meters across from the citadel, were all in ruins also, but the objects brought to light there were more numerous and finer: pretty bits of glass ware cut in facets, terra cotta lamps, a great ring and loops of bronze (?) badly corroded, and finally a beautiful bronze cup (diameter 127 mm., height 28 mm.) with three little feet (found December 9, 1928).

In the upper fill were found fragments of a coating of plaster decorated with painting, but in such small pieces that it was impossible to restore a single *motif* from it. One of them, however, farther to the west, remained on the wall and seems to represent the tiara of a king, perhaps Parthian. It is in a building adjoining the sanctuary (?), about forty meters farther to the west.

Finally, on December 9, appeared a small altar carved in the white limestone of the region; it measures 0.65 m. by 0.47 m. at the base and 0.46 m. by 0.45 m. in the middle of the shaft. It was slightly moved

<sup>1</sup> *Rep. I*, Pl. V, p. 69.



from its original position, which is well marked on the flooring of mortar.

On the front is an inscription cut in good Latin characters (34 mm. in height), enhanced by red paint (Pl. XXXV, 2 and p. 83, Fig. 1). Unfortunately, all the upper part of this stone, damaged by the humidity, soon crumbled, but after transcriptions and photographs had been taken. The inscription mentions a temple built by the Roman archers of the second cohort of the Ulpian Legion, which had enlarged the local Campus Martius.

This drill ground is probably the space defined by great walls parallel to the western face of the citadel. These are outlined on the ground and are connected with other walls at right angles to them, which ascend to the level of the city. This long hollow, through which passes the modern road from Deir to Abu Kemal, could, in fact, furnish the garrison with a sufficiently large and well-protected drill ground.

This little shrine of the garrison of occupation (Pl. V) now seems to have consisted of a large room (A, B) and a vestibule (C).

The large room measures 10.20 m. in length, northwest to southeast, and 8.15 m. in width. The ceiling was held up by four square pillars, built up in plaster masonry (0.60 m. on the sides and 0.85 m. at the base); at the back, behind the altar (A), two engaged pilasters probably supported a decorative design, no doubt a niche (Pl. XXXV, 2). The fragments of frescoes which were found here come, it seems, from the pilasters as well as from the side walls.

Toward the west there is a small sort of basin for ablutions, surmounted by a small niche. Finally, a small fragment of plaster decoration, from the frieze or the cornice of the temple, is decorated with scrolls, egg and dart, fretwork, and tongue pattern (Pl. XXXVI, 1).

The entrance to the temple, whose doorway is 1.35 m. wide and 1.65 m. deep, is situated in the southeast wall and opens into a small rectangular vestibule.

### 8. *The Temple of Artemis.*

To prepare for the complete excavation of this temple of which an important part and the general plan were brought to light by the splendid excavations of M. Cumont, preliminary clearing of the ruins was carried out. Then, at the end of March, we proceeded to remove a part of the fill accumulated on the site so as to provide a roadbed 246 m. in

length for the narrow-gauge railway. When this first work was finished the earth was thrown into the south ravine.

### 9. *The Northwest Baths.*

Between the Tower of the Palmyrene Gods and the Tower of the Archers, about 150 m. from the latter, a mass of fill, from which rose blocks of concrete and bricks of the Roman period, was attacked in December, 1928. Mr. Clark Hopkins devoted himself to this excavation (Pl. VI).

A rectangle (northwest-southeast) approximately 35 m. by 28 m. was opened, and then a long heating gallery was followed to the north ravine.

In the present condition of the excavations, this building is as follows: At the southeast it was entered by a vestibule (A), which was fitted out with masonry benches along the walls. At the right, a door gave access to a long waiting room (B), measuring 14.50 m. by 4.09 m., paved with kiln-baked bricks 0.32 m. square, and also provided with benches placed against the walls. It was decorated with paintings; from a great quantity of shapeless fragments three almost complete faces (Pl. XXXIX, 3) were discovered on December 30 and 31, 1928. Near the west corner of this room, at the left, opens a room (C) 12.06 m. by 4.12 m., with an annex, a small dressing room (D). Both rooms are paved with bricks 0.32 m. square.

The western part of room C served doubtless as the frigidarium rather than the tepidarium, because it is known that in the Orient the latter is reduced to the minimum when it is not omitted, which happens frequently enough.<sup>1</sup> At (a) is a little semicircular basin for douches, and, at the back, at (b), is a large pool (3.25 m. by 2.30 m.) into which one descended by small steps placed in the left corner. The pool is 0.69 m. deep.

Next was the calidarium, E; at its western end is a rectangular basin (h) for hot douche-baths, and a supply reservoir (R) is placed behind, above a vaulted heating tunnel (S). A little closet (c) opening from the calidarium must have held a warming pan or brazier, for it has no heating system.

In the north corner of room E a door opens into a suite of three laconica (F, G, H), built on *suspensurae*; the entire surface of their walls

<sup>1</sup> R. Cagnat, *Manuel d'archéologie romaine*, I, 225.

was heated by hollow tiles which communicated with the heating system under the floor.

The first laconicum, F (5.01 m. by 3.07 m.), with a great semicircular apse at the eastern end, represents, as does the following, G (5.28 m. by 2.97 m.), sweatingrooms, for they had no baths or pools such as are found, on the contrary, in the room to the west, in (e) and in (d). This last room must have been superheated by the nearby furnace T, whose firebox still remains; in the eastern corner is preserved a length of lead pipe communicating with reservoir R.

The excavation in the baths produced only fragments of frescoes, lamps, and Roman rings, a few coins and little toilet utensils. At U a long gallery, held up by pillars of rough masonry, was filled up to the present level of the ground by the ashes of the furnace. They formed a compact mass which shows the long use of this bathing establishment. In the present state of deforestation of the region one is astonished by the quantity of wood which must have been brought to this spot for heating the baths. It must be recalled, however, that in ancient times, and even in the Roman period, the banks and neighborhood of the Euphrates were rich in wood.<sup>1</sup>

#### 10. *The Graffiti of the Houses of the City.*

On the walls of the houses of the city, cleared by earlier excavations, can be distinguished numerous graffiti cut with a fine point on the successive layers of plaster which belong to various periods of repair.

Hasty inscriptions recalling a simple name are frequent; others are more ambitious and contain several lines of text. Mr. Jotham Johnson devoted himself to them during a part of the season and was able to decipher a certain number of them.<sup>2</sup>

Among the various designs are a zodiac (Pl. LI) and lions (Pls. XLII, 2 and XLIII, 1) but the greater part represent horsemen or mounted archers (Pls. XLI, 2 and XLIII, 2). Their costume, their unusual headdress, divided into three parts, one on top of the head and two over the ears, and finally the kind of horse which they ride, with small narrow heads, but powerful bodies and well-developed cruppers, supported by firm but delicate legs identify them as examples of Parthian art.<sup>3</sup>

<sup>1</sup> Ed. Note: See below, pp. 61 ff., for the report of Clark Hopkins.

<sup>2</sup> Ed. Note: See below, pp. 161 f.

<sup>3</sup> Ed. Note: See below, pp. 194 ff., for the report of Professor Rostovtzeff.



## II

### REPORT ON FINDS

BY CLARK HOPKINS

#### I. THE BUILDING PERIODS

DURING this season's excavations two building periods were discovered on the citadel, a later palace having been built over the remains of an earlier building; and two periods in the Palmyrene temple in whose tower an earlier structure was discovered. This latter discovery was especially important since the tower as a whole forms one of the bastions of the great circuit wall of the city. It seemed imperative, therefore, if only tentatively, to review our evidence for the building dates of different structures, in an attempt to trace more accurately the economic and political growth of the city.

As the map of the citadel shows (Pl. IV), one strong wall of the earliest building remains. It is comprised of two courses of square-cut stones, the upper composed of a row of headers, with surfaces very carefully chipped, set back from the lower forming a very narrow step (Pl. XXXI, 1). So closely are the blocks fitted together that there is scarcely space for mortar between them. From this wall to the northeast a series of rooms is formed by cross walls of quite different construction, small unsquared blocks for the most part, making very weak divisions compared with the splendid foundations from which they spring. Unfortunately part of the cliff has been cut away by the river at this point so that the northeast end of the building has disappeared (see air view, Pl. XXIX). One expects another strong foundation corresponding to that on the southwest and if this were so the building may have been a Greek temple. We know that the strong wall formed part at least of a stylobate, for one of the column drums remained. The structure faced northeast dominating the valley from the top of the cliff and the heavy foundation walls must have supported the great columns or walls carrying the roof. The argument against an early palace rather than a temple, however, is conclusive only if one wishes to see a fortress palace or strong point corresponding to that of the redoubt on the other side of the wadi. Such a fortress palace could never have been built with weak side walls, nor with an open row of columns above the strongest founda-



tion wall. In any case the pottery allows us to trace it back to the earliest period at Dura, i.e., Hellenistic times, for the typical Hellenistic lamps, as well as black glaze Greek lamps, were found there together with fine black glaze plates of Greek or early Hellenistic types. Tinted plaster from this early building showed red, yellow, and blue, just the colors used in the wall coloring at Olynthus in Macedonia;<sup>1</sup> and the composition of the blue made of cobalt and copper just as that in Macedonia linked the building at once with the Macedonian founders who began the settlement.

A more important question from the point of view of the economic development of Dura is the relation of this early building to the great wall surrounding the citadel. One expects that some protection would be flung around the citadel even though Dura lay at the time in the middle of the great Seleucid empire and squarely on that most important route from Antioch to Seleucia. The absence of black glazed pottery in the citadel tower, excavated this season, might easily be explained by the lack of elegant utensils in the soldiers' equipment. A fragment of a bowl in relief done in the so-called Megarian manner does in fact set the citadel fortifications back to an early period, perhaps even to the Greek epoch at Dura. On the other hand the type of construction of the walls of the citadel corresponds not at all either to that of the redoubt with its Hellenistic round faced blocks, or to the walls of that earlier building we have been examining. In this early building the blocks were carefully chiseled, set very close together, scarcely linked with mortar at all; in the citadel wall the surface is left rough and coarse, the blocks are less carefully set and plaster much more generously used to fill up imperfections. In this respect, then, the citadel walls correspond much more closely to the walls of the second building on the citadel, that of the strong fortress palace built over the remains of the earlier building. Here as the photograph shows (Pl. XXXI, 1), there is a striking contrast to the earlier building, in the facing of blocks, their fitting together, and in the use of plaster; in all of which details this second building corresponds with those of the surrounding wall. This second building, however, is almost certainly Parthian, for one very peculiar feature of its construction, that of the structure removed from the main series of rooms and surrounded by a corridor is paralleled at Hatra (see

<sup>1</sup> D. M. Robinson, *Excavations at Olynthus*, Part II, "Architecture and Sculpture" (1930), p. 115.

plan of citadel, Pl. IV and plan of Hatra).<sup>1</sup> It is what we expect indeed, for the Parthians must have occupied Dura shortly after the middle of the second century B.C., and their occupation gives adequate reason for the destruction of the first building and the erection of another edifice in its place.

Before going further with this discussion, however, it seems well to glance at the discoveries in the tower of the Temple of the Palmyrene Gods (Pl. VII, L). This tower forms one of the series set at intervals in the long course of the city wall. At the same time it falls within the temple precinct and seems to form an intrinsic part of the temple scheme, for its doorway opens into the court of the temple and its north wall is the side wall of the naos itself, on which were painted the chief frescoes which had first called attention to the site. M. Cumont had begun excavations of the tower but had been delayed by the great blocks of stone fallen from the top and had, therefore, been unable to finish the work. Our own excavations showed that on either side of the doorway, to a height of 2.05 m., alternately broad and narrow courses of stone were laid; from bottom to top 0.78 m., 0.32 m., 0.60 m., and 0.35 m., respectively. The surface of the blocks was carefully smoothed; in each course headers and stretchers alternated (Pl. XXXII) and the blocks themselves were so exactly fitted together as scarcely to allow for mortar between. As the diagram shows, this same type of construction continued along the side wall of the long tower, a distance of 5.80 m., then stopped abruptly in a jumbled mass of badly cut stones 3.50 m. wide (Pl. XXXIII, 2). Beyond this quite a different type of construction—the regular header and stretcher system—had been employed (Pl. XXXIII, 2), with the alternate courses of the same width, 0.35–0.40 m. (thick mortar making up discrepancies). Finally the lack of interlocking blocks between the two parts showed conclusively that the two parts of the tower had not been built at the same time. The upper part of the tower furnished still stronger proof, for above the height of 2.05 m., a regular type of construction as the diagram shows completely circled the building, the blocks interlocking at every point. The type of construction of this upper portion was the same as that which formed the lower courses of the rear end of the tower; and the same fairly rough cutting of the blocks, the same type of mortar work between the stones as well as the similar methods of laying the courses left no room for doubt that this work had been done simultaneously. It was clear that an

<sup>1</sup> Andrae, *Hatra*, Part I, Pl. II.

older smaller building had been inclosed by the new one and the different facing of the blocks and the change in mortar work, disclosed at once the limits of the smaller section. That this was so was satisfactorily demonstrated when digging beneath the floor level revealed the explanation of the mass of roughly cut blocks separating the two types of construction work. Here the lowest blocks had been allowed to extend toward the center of the room untouched (Pl. XXXIII, 2), and revealed the bottom of a wall which had once stretched completely across the tower. It was this which had formed the back wall of the earlier building, a wall which had been hacked off short when the tower was extended, leaving the irregular masses of stone of which the surfaces had never been smoothed off.

The completed tower, as has been said (see map of city, Pl. XXX), was one of the regular series in the great circuit wall; the method of construction in the rear and upper part of this Palmyrene temple tower was exactly the same as in the other towers of the wall. There was no doubt, therefore, that this later section of the tower had been built simultaneously with the rest of the great towers. But what was the date of the great circuit walls and what the date of this earlier building in the Palmyrene temple tower? Here conclusive evidence fails us, but indications from material both in the temple and tower allow us to make at least tentative suggestions.

M. Cumont from a study of the frescoes of the Palmyrene Temple very brilliantly suggested the last half of the first century A.D., as the period of their execution. A discovery of this season in the shape of an inscription of 50 A.D., the earliest inscription thus far found in the temple, confirmed his supposition and with the frescoes gave a reasonable hypothesis for the date of the erection of the temple as a whole. Discovery of a piece of *faïence* in room E seemed to confirm this supposition, at least for this section of the temple, for the *faïence* came in gradually and apparently was introduced not much before the beginning of our era.

More important for our purpose was the discovery of the altar to Iarhibol just outside the tower of the temple and the discovery inside the tower itself of an altar *in situ* with an inscription dedicating it to Zeus at the time of the great earthquake, 160 A.D. Remarkable enough would this have been if it had been erected by soldiers, but when we see that it is the city itself which establishes this new altar in the time of stress, then our amazement at its location is complete. If the naos and pronaos, all the rooms of the new edifice are neglected in favor of this



old tower, inhabited by soldiers, then there must be some special reason for it. For this fact the best explanation seems to be that the earlier structure had been the original sanctuary erected at this place and that this was later inclosed in the circuit walls. The religious character of the early building seems borne out by the many MNHCΘH inscriptions scratched on the walls, by the chipped representations of dancing figures scratched on the surface of its great blocks, finally perhaps by the rayed countenance of the god himself. This has been discussed elsewhere and we can here call attention to only one feature. An early sanctuary there seems to have been and for this reason it is that the later temple taking the place of the old sanctuary was constructed in this far corner of the wall. For this reason also when the new temple was built it was centered about the older structure; the great pictures were constructed against the wall of the earlier sanctuary itself; the new court was flung about the entrance to the old chapel and the series of rooms constructed on either side. One expects, however, that if such a new structure is to be erected it will be begun as soon as the older sanctuary is inclosed in the great walls and it is rendered unserviceable for the ancient cult. The paintings, therefore, dating back to the first century and the inscriptions running back to the same period are strong presumptive evidence that it was then that the great walls were built.

How much older the more ancient building might be is more difficult to determine. That it is considerably more ancient is suggested by the difference in formulae used in the common inscriptions from those on the main gate. The curious form  $\mu\nu\eta\sigma\theta\epsilon\iota\eta\varsigma$  several times repeated in graffiti on the walls of the old sanctuary must come from a period before the later form  $\mu\nu\eta\sigma\theta\eta$  became so common on the main gate. In this particular we may link the older sanctuary of the Palmyrene gods with the citadel construction for one of the few inscriptions scratched on the walls of the northwest citadel tower shows quite clearly the form  $\mu\nu\eta\sigma\theta\epsilon\iota\eta\varsigma$ . On the other hand, I suggest that the cult recalls very sharply Parthian influence. M. Cumont has shown that many details of the frescoes show Semitic features. It is, however, a particular interpretation of Semitic cults confined almost exclusively to Palmyra and Dura. The sacrifice is not Persian nor is it Greek. But the insistence on the solar character of the cult, the trinity of male gods, the sacrifice to fire and water, all suggest Iranian influence. It is too early to say definitely that it is Parthian; too hazardous to claim that on this account the cult place

of Zeus-Baal, Iarhibol, and Aglibol should have been established in the Parthian period, but the trend of the evidence seems to point to this epoch for the introduction of the peculiar cult which loomed so large later in Palmyra.

Before leaving the discussion of the tower and the circuit walls, we must, however, touch upon the question of the corbeled arches which mark the entrance way and here we are led back to the citadel and its constructions, for this same remarkable type of doorway distinguishes its entrances also. The photographs (Pls. XXXIII, 1 and XXXIV, 1, 3) show clearly the distinctive types we have at Dura; Pl. XXXIV, 1, the back view of the entrance to the northwest citadel tower with its high pointed arch and back supporting wall; Pl. XXXIII, 1, the type in the Palmyrene temple tower with slightly rounding arch and no back wall; Pl. XXXIV, 3, the type regularly employed in the towers of the great circuit wall with its shallow arch and lack of back wall. We cannot go here into a discussion of the origin of the type, or reappearance of the type as a whole. It was common in Thrace and the Black Sea area in the fourth century B.C., and perhaps Professor Rostovtzeff is right in suggesting its source as the old Mycenaean type of construction continued in Asia Minor.<sup>1</sup> The use of such a corbeled arch with supporting back wall in the great fortifications at Assos about 260 B.C.,<sup>2</sup> as well as a slightly similar feature at Heracleia,<sup>3</sup> suggests that it was a Hellenistic feature carried through the East. On the other hand we have the same type at Hatra, corbeled arches even higher than at Dura, constructed in a much later period, and we cannot escape the inference that it may have been an Iranian type reintroduced into South Russia and Asia Minor through the Persians and Scythians, brought to Mesopotamia and Syria by the Parthians. This whole subject demands reinvestigation in the light of new discoveries and the fortifications at Dura will form most important links in our evidence.

Meanwhile we can trace at Dura at least certain steps in its evolution. One must remember that Dura forms a link between the East and

<sup>1</sup> Rostovtzeff, *Iranians and Greeks in South Russia*, pp. 78-79.

<sup>2</sup> *Investigations at Assos*, Clark, Bacon & Koldewey (1902-1921), pp. 203 and 205. Cf. Gate 5 at Assos, p. 201. For its use in Greece proper, see Perrot et Chipiez, *Histoire de l'Art*, VII, Pl. XI.

<sup>3</sup> Krischen, *Die Befestigungen von Herakleia am Latmos*, p. 17, Fig. 13, 7, = Milet, *Ergebnisse der Ausgrabungen und Untersuchungen seit dem Jahre 1899*, Band III, Heft 2 (1922).

West, marking a junction of the route from western Syria to the Tigris and the Far East,—between the Greek-Roman cities of Palmyra and Baalbec and the eastern Parthian centers at Hatra and Ctesiphon. But the West kept to the flat-topped doorways as the temples at Baalbec and Palmyra, particularly the tower tombs running back to the beginning of our era, show very clearly. We have Hatra to witness that the barrel vault with back wall and the very high corbeled arch remained near the Tigris.<sup>1</sup> The two influences met at Dura and the sequence of corbel-arched doorways we have there is the result. Striking indeed at Dura is the difference between the two extreme types of construction. Glance for a moment (Pl. XXXIV, 1) at the high arch of the citadel running through four courses of stone, some 1.50 m. high in all, supported by a back wall in every case; then at the representation of the entrance to the Tower of the Archers (Pl. XXXIV, 3), its shallow arch typical of the towers of the circuit wall, running through scarcely two courses of stone, not more than 0.60 m. high, always without supporting wall, and the difference strikes the eye at once. Of the five or six corbeled doorways thus far found in the towers of the main wall all are of exactly the same type. On the citadel seven entrance ways and loop-hole niches have been thus far revealed showing the corbeled vault; the height differs sometimes between doorway and niche; in all the back wall remains, the arch runs up in every case to a meter or more in height.

It is just because of this sharp distinction between citadel and circuit wall that the doorway of the Palmyrene temple tower, the entrance included in the earlier building (i.e., the older sanctuary) is so valuable. Pl. XXXIII, 1, shows its construction in detail as does the diagram of the tower. It has no supporting back wall, rounds slightly to the top, runs through only two courses of stone, but reaches a height of some 0.85 m., because one course of stone is so much higher than the average course in the later wall. But here we know that the sanctuary is anterior to the circuit walls; we know, therefore, that the tendency was from the high vault to the shallow one; a tendency we would have suspected in any case as we see its gradual disappearance or modification in Asia Minor and Thrace. The last step in its change for the region of Dura we may see at Irzi twenty miles down the river, where the tomb built in the late Palmyrene period shows just the remnant of the type, a very

<sup>1</sup> Andrae, *Hatra*, pp. 37, 87, 99, 120, etc. 9 and 21. Wissenschaftliches Veröfentlichung der deutschen Orient-Gesellschaft, 1908-1912.



shallow vault running through a single course of stone. The increasing western influence from Palmyra and Mediterranean Syria flattened the arch, and brought about an almost complete renunciation of the principle.

But this development gives us a most valuable clue to the building periods. We know that the great circuit walls must be put back at least as far as the beginning of our era. The citadel fortification wall may possibly have been built in the first period, the Hellenistic era. Similarity of construction with that of the second palace on the citadel top, similarity again in high corbel-arch doorways, suggest that it should be placed in the Parthian period, i.e., after 150 B.C. The larger entrances of the citadel, with barrel vault and supporting back wall suggest again the great halls and arched roofs of Hatra. Further excavations must determine finally the date of this structure. Certainly between the citadel and the circuit wall may be placed the building period of that little original sanctuary on the edge of the northern wadi, whose position determined the place of the later Palmyrene temple, whose structure was later included in a tower of the circuit walls, and whose doorway gives us just the step needed to show the transition between the types of arches in the citadel and those of the circuit towers.

Contrariwise, if the citadel falls in the Parthian period, or even in the late Hellenistic period, and sufficient interval be allowed between the date of its construction and that of the early sanctuary of the Palmyrene temple to account for the advanced type of construction; if another interval be allowed before this building is included in the circuit wall to account for the further change in the type of doorway; then the great circuit walls could not be erected before our era or very little before its beginning. The sharp change in formulae in the usual phase of remembrance,  $\mu\nu\eta\sigma\theta\epsilon\acute{\iota}\eta\varsigma$  in the citadel tower and the old Palmyrene sanctuary, and that of the main gate  $\mu\nu\eta\sigma\theta\eta$  accentuates the period of time to be put between the constructions.

There does, indeed, seem to be very good reason why the city of Dura should flourish at this period, the beginning of our era, and why the great circuit walls should be built at this date. It was not until 20 B.C., after fifty years of constant war and continually shifting border lines that peace was definitely established between Roman and Parthian and a definite border line determined upon. Isidorus of Charax<sup>1</sup> tells us

<sup>1</sup> *Stathmoi Parthikoi* I.

that the line at this period was opposite the mouth of the Khabour whence he says the legions cross to Roman territory; and thus places the border not 30 miles north of Dura and makes Dura the first post within the Parthian Empire. Furthermore, it was the first important post on the west side of the river, and so the toll center from both north and west. But peace brought prosperity and the city increased rapidly as the new temples of Atargatis and Nannaia at this period show. Dura had always had the name of *polis* as Palmyra had in 41 when Antony took it without a blow with a small cavalry force.<sup>1</sup> Now both Dura and Palmyra rose to be great centers, and when toward the end of the first century A.D., Vologasias was constructed not far from Ctesiphon as the end of the Syrian-Mesopotamian trade route, it signalized the results of the new epoch of prosperity throughout the whole region. Cumont had suspected from Hellenistic features in the construction that the circuit walls at Dura were built at the beginning of its foundation. This date must be changed in the light of present evidence, but we can still admire the architectural skill with which natural features of the terrain were utilized to make the fortifications as strong as possible, and we can still see from Cumont's and Colonel Renaud's brilliant study,<sup>2</sup> the Hellenistic principles carried down under Parthian direction.

A question still remains, however, in those sections of the great wall not made of squared stone, but of rubble, one such just behind the Roman bath; another where the Deir-ez-Zor road cuts through the fortifications just north of the Palmyrene temple. In both these places rubble faced with gypsum mortar takes the place of the great squared stones of which most of the wall and all the towers are made. It is difficult to tell

<sup>1</sup> Appian, V, 9. The name *polis*, as the case of Palmyra suggests, does not necessarily mean that the center was one of considerable size. We know from Isidorus that all the posts along the Euphrates founded by Macedonians bore the name of *polis*. As Professor Harper has shown in his excellent dissertation on Village Administration in Syria (*Yale Classical Studies*, I, 105 ff.) a very arbitrary distinction was sometimes made, at least by the Romans, between city and village, a change in title being made by command of Roman authorities (p. 115) without apparently any change in size or population. In an earlier period a village or villages grouped about a fortified citadel might be called a *polis*, as was the case with Mantinea (p. 106). It would seem that at Dura either the introduction of Macedonian colonists or the fortification of the citadel would be enough to bestow the title of *polis* upon the settlement, the term being indicative rather of the type of privilege for which the inhabitants were eligible than of the size or population of the city. This would explain somewhat the fifty-nine cities founded by Seleucus (Appian, *Syriaca*, 57).

<sup>2</sup> *Syria*, V (1924), 24 ff.; Cumont, *Fouilles*, pp. 1 ff.

whether this rubble and mortar work substituted in these two stretches had been adopted because of lack of the more durable material, and for greater speed in building; or whether it was the result of later repairs. At the bath the evidence suggests the latter reason. At this point the wall runs along the edge of the wadi thus reaching considerably below the surface of the plateau. Our excavations showed that the bank just behind the wall had in former times been dug up or destroyed by a break and a fill of ash made later to fill the gap. That the fill was very late seems probable from the fact that the ash runs up to the surface of the ground, and that it had all been filled at the same time seems sufficiently clearly indicated from the unbroken continuity of the deposit. It may have been that a passageway along the bottom of the walls was kept clear for some time after their construction, then filled in. More reasonable does it seem to perceive in this stratification the result of later work. We know that a serious earthquake shook the town in 160 A.D. It is very possible that the wall here, especially with the pressure of the bank behind it, may have given way and rolled down the slope, buried beneath earth from the bank itself. By this time the heavy construction of stonework had been given up. Furthermore, the Roman threat was imminent and speed in repairing the walls would be essential. Mortar and rubble were hastily requisitioned, therefore, to reconstruct the broken portions, then the gap behind, between the lower section of the wall and the ground level on the higher plateau was filled up with the material most available. An even later date is suggested, however, by the ash fill apparently from the bath and from the continuance of the fill to the very surface of the ground itself.

More positive evidence we have for the time of construction of the mud brick walls built within the circuit walls of the city, for here we have ceramic material. The surface of these constructions has been washed down by rains and the sand has drifted in to round off the sides, till long slopes are formed inside the walls of stone; and it is impossible to distinguish the bricks themselves. Where the cut through the wall has been made, however, by the Deir-ez-Zor road, and where excavations have been completed, as for example at the Main Gate and the Tower of the Archers, the bricks are revealed. Fortunately for us in many cases the brick makers included sherds of pottery and from these sherds indication of the building dates can be obtained. In the Tower of the Archers, well within the surface of the line of bricks, sherds of both *faïence* and the late ribbed brittle ware were found; and the same types



of sherds were discovered in bricks in the Deir road cut. This ribbed type may have been introduced in Dura before the Romans entered. As far as present evidence goes, however, it was one of the changes which heralded the new Western influence introduced by the Roman garrisons. The presence of these sherds, therefore, dates the walls not only to a period posterior to the entrance of the Romans, but apparently to a period considerably after their entry, for the new type of pottery must have been very common when the mud brick walls were built. M. Cumont had already branded them as late for he found a part of one built before one of the frescoes in the Palmyrene temple. Apparently in the case of the tower just north of the Deir road the mud brick wall was built across the front of the tower completely blocking its entrance. It may be, therefore, that it was not until the very latest period of the city that this additional strength was added to the fortifications.

Tentatively then we may designate the chief periods of building and the types of construction belonging to each. For the redoubt we can only repeat the words of M. Cumont that it is, indeed, in the Greek peninsula that we must seek for examples of this style of embossed masonry, which gives the redoubt its peculiar appearance, and which is not otherwise found in the ramparts of Dura. It was a type of construction most common in the fourth century in Greece and it is the redoubt which seems to reflect most strongly the Greek tradition brought by the first inhabitants. It is logical also to postulate a comparatively small fortress for the first settlement. A larger one was built later in the period, or by the Parthians apparently at the beginning of their occupation. This was characterized by the barrel vaulted great door flanked with back drop and the narrow door with high pointed corbeled arch and supporting curtain. When the older section of the Palmyrene temple tower was built, the type of doorway had already been modified to dispose of the back drop and make the arch less high. Finally when the great walls were built the arch had been further lowered, to make way for the simpler and easier type. These walls built at the beginning of our era probably marked the abandonment of the inner towers of the citadel. If the result of the earthquake can be seen in the mortar and rubble work near the bath and Deir-ez-Zor road, we may see the abandonment at this time of the heavy square cut masonry of solid gypsum and date it accurately to 160 A.D. Later reinforcements were constructed of mud brick, perhaps because their weight was the best resistance to the battering ram; perhaps, as the late house walls suggest, because sun-baked bricks had now

become the chief building material of the city. These walls may have marked the last resistance of the city and should be perhaps allocated to the period just before its abandonment about 260 A.D.

## II. THE POTTERY

### 1. *Fabrics and Types.*

As is common in ruined cities, the great site of Dura is covered with the potsherds of former inhabitants. In general those on the surface, beaten by the wind and dust, disintegrating even in the dry climate of the Syrian desert, show a monochrome color. There is as always the prevalence of thick coarse sherds, perhaps because their very size attracts the eye; beside these lie pieces of smaller finer vessels, a large part made of the yellow sandy clay of the region. From among all these sherds two types stand out. The first is a black or brick red ware exceptionally thin and brittle, generally finely ribbed. The *faïence* ware forms the second; the sherds covered with a type of glass enamel, an opaque green or blue in color covering a biscuit of pale plain yellow or yellow green less finely baked so that it has a flaky appearance. It is these two types which strike the eye at once wherever one wanders within the circuit of the great ancient walls; and which are particularly characteristic of the last inhabitants whoever they might be; as contrasted with the sherds of plain yellow and pink, which occur without so great alteration throughout all the levels of the site as well as from one end of Mesopotamia to the other.

It is then particularly important to see if these two special varieties were used before the time of Dura's decline in the third century, or were brought in later by desert tribes or squatters who, finding many of the houses still standing, took advantage of the opportunity for comfortable winter quarters. The very fact that the sherds are most common, and not confined to one section of the city, suggests that the last inhabitants, when the city was still flourishing and prosperous, had these types in general use. Nor is it in the city only that the sherds appear in numbers, for on the surface of the ancient city dumps, one of which lies a hundred or two hundred yards outside the great gate leading to Palmyra, they are everywhere in evidence. In the southwestern quarter of the town a building with so great a number of vessels and fragments was found that it has been called the potter's shop, rightly I think, for the number of sherds is out of all proportion to those found in

neighboring houses. One would suppose that this shop, which is not close to the center of the town, nor to the citadel and the river road, would be a good criterion of the implements of the desert post while it was still strong and flourishing. Both the *faïence* ware and the thin ribbed appear here in considerable quantities, not such as to vie with the great mass of coarse sherds, and the usual yellow monochrome sherds of smaller vessels (a fact which is only natural when one considers the usual relation between common types and the finer varieties), but in amply sufficient quantities to show that they were both well known and common. But there is stronger proof, for in the great mass of mud bricks which line the interior of the standing stone walls, many are re-inforced in part with potsherds. As a rule the bricks have been covered with desert sand, washed down by the rains and trampled together not only by the passage of centuries but the roving feet of wandering flocks, so as to form a great bank within the walls themselves to the top of the battlements. But in the Tower of the Archers, after the *débris* of the interior had been removed, it was possible to find, well within the surface of the walls of bricks, both sherds of *faïence* and sherds of the thin ribbed ware. It is possible that the city could have been occupied at a later time by a sufficient force to hold the walls, and that at this period the interior walls of mud brick were erected, though this seems extremely improbable. Fortunately, however, conclusive proof of what might be called the classical use of *faïence* and corrugated ware is furnished by the little temple of the Palmyrenes. In several rooms of this building the plaster-covered walls were lined with mud bricks, a type of construction very common at Dura. The walls are still standing in part though broken, leaving the mud bricks plainly visible and in parts of the rooms the ancient masons had the happy thought of introducing potsherds to strengthen the sun-baked clay. Well within the west wall of room K (Pl. VII), beneath the covering layer of plaster, sherds of both ribbed ware and of *faïence* were found, and in the small section of wall still remaining in room E a sherd of *faïence*; and one with a dark brown clay similar to that of the ribbed ware was discovered, but without its characteristic bands. M. Cumont was able to date room K to the Roman period, 165–260, with accuracy through the painting still on one of the walls and the inscription Ὁτῆς εὐνοῦχος ὁ κτίσας τὴν ἐξέδραν. Earlier parts of the temple were dated by Cumont to the first century A.D., and the discovery this year of an inscription of 50 A.D. confirms this supposition. One expects room E to have made a part



of this early section, for it is closely linked with the naos and pronaos. If this is so then this date will form a *terminus ante quem* for the introduction of the *faïence* ware.

Pl. XLVIII, 2, shows examples of complete vessels of thin brittle ware found at Dura. These types, with the ribbed surface and blackened exterior, are by far the most common as the great proportion of this type of sherd shows. Other vessels (Pl. XLIX, 2, a and 303) lack the ribs and are made of red-brown clay throughout, but the thin brittle character of their composition places them unmistakably in this class. Fragments of other vessels were also found; plates with no ribbing, others with the ribbing on the inside of the vessel, and shallow cups shaped in general like the champagne glass but with thin handles rounding from the lip, made generally of gray clay.

This type of clay as well as the general form of the vessels is well known and falls into a great class of ware found from the Mediterranean to Turkestan. Fisher found exact parallels to our bowl as well as pitchers rather similar to ours at Samaria and placed them among the Hellenistic vessels.<sup>1</sup> At Samaria the types, particularly the two handled bowl, continued in Roman times<sup>2</sup> and at this period at least became widespread for it appears on the surface at Palmyra, Dura, Irzi, and Halibiyeh. Sir Aurel Stein reports it even from Seïstan.<sup>3</sup>

From the East probably through the Parthians came the blue-green *faïence* ware. We find the same type of glaze on the slipper coffins of Warka, and as Sarre remarks sherds of this Parthian-Sassanian pottery are found in all the ruins of cities inhabited during this epoch both on the Tigris and Euphrates, Eski-Meskene, Rakkah, Halibiyeh, Tabus, Tell-Fudain, Suwwar, Nineveh, Nimrud, and Ctesiphon. Sarre<sup>4</sup> publishes an example from the Kaiser Friedrich Museum which must be very similar to the characteristic form at Dura, for Dura types had the same round-bellied structure and wide base, while many finds of the high ornamental handles indicated the long characteristic neck. This type was brought in with the introduction of *faïence*, then the method

<sup>1</sup> Reisner, Fisher, Lyon, *Harvard Excavations at Samaria*, pp. 299-300.

<sup>2</sup> *Samaria*, p. 309.

<sup>3</sup> Sir Aurel Stein, *Innermost Asia*, 1928, Plate CXV gha 02, 07 and 08 k.g. 024 and 0223. Cf. Chap. XXVIII, Sec. II and Chap. XXX, Sec. III.

<sup>4</sup> Sarre, *Die Keramik im Euphrat- und Tigris-Gebiet* (Sonderabdruck aus: *Archaeologische Reise im Euphrat- und Tigris-Gebiet*, von F. Sarre und E. Herzfeld, 1921).

of manufacture was applied to the ordinary type of vessel and there appears the lemon-shaped jar, the small vase, and the plate all with a coating of *faïence*. Special mention should be made perhaps of the plates of which half of a particularly fine example was found, a type differing slightly from the ordinary run, for it has no stand. The unpublished pottery from Nippur in the University of Pennsylvania shows all the common types covered with *faïence*. At this period in Dura the black and red glaze wares were disappearing; Megarian fabric was always rare and had long since gone. *Faïence*, glass, and the later ribbed ware took their place; and it is only natural that the typical *faïence* glaze should be applied by local potters to all the common types of vessel to care for the demand. M. Cumont's excellent publication of his finds shows many types of this genre not found in last year's excavations.<sup>1</sup>

Mr. Johnson found on the surface of the site two examples of figured relief, one of a head in late Greek style, the other of a naked Silenus riding a donkey and carrying probably a thyrsos in his hand (Pl. XI, 1-3). Handsome Syrian vessels from the Roman room of the Metropolitan Museum of New York with the same type of glaze, show double twisted handles; handles ending in a leaf pattern grasping the vase, and figured relief at the juncture of handle and shoulder, and around the neck.<sup>2</sup> Vessels from Dura show the same type of handles, and almost the same feature for the juncture of handle and vase. Our relief figures must have been of the same class; the head either linked to the end of the handle or set medallion-wise around the vase, as the vase (Pl. L, 1) suggests; the riding figure ornamenting shoulder or neck of a large vessel. One *faïence* figure was found in the 1928 excavations, the head and neck of a man perhaps adorned with a beard (Pl. XI, 4).

The introduction of *faïence*, as later the introduction of brittle ribbed ware, brought about new shapes and styles of manufacture in Dura; these new types, along with glassware, drove out the black and red glaze vessels, but they could not shake the common types of coarse yellow clay vessels which persist at Dura from beginning to end. These represent the timeless Mesopotamian types found along both the Tigris and Euphrates, made everywhere with river clay, made always in the same general forms. At Ashura, ten miles north of Dura, where the river has

<sup>1</sup> Cumont, *Fouilles*, Pls. CXVIII-CXXI.

<sup>2</sup> No. 17.194.886 with boy's head on end of handle; 23-228 from Salemeyih with double twisted glazed handles and figures and heads around the neck; 17.100.2069 with the handle ending in a leaf pattern and with human figures around the neck.

cut the side of the forty foot tell and the lowest levels reach back to neolithic times, the same type of yellow and yellow-pink sherds are found on the lowest levels and the top. The pottery from Nippur shows in general the same forms as at Dura, the slightly lemon-shaped vase with one handle, the round-bellied pots, the shallow bowls and the small jar. At Dura the shape and size may change slightly, but it is more the idiosyncrasy of the potter than the period or the style. Pl. XLIX, 1, Nos. 326 and 327, show the common types, the small jar sometimes used for feeding bottle; No. 328 the long, slightly lemon-shaped vase (Pl. XLIX, 2, No. 329), the round-bellied jug, Pl. XLIX, 1, Nos. 330 and 331, the shallow bowl sometimes used for open lamps, and No. 325, the deeper bowls supported on short legs. Larger vessels include pitchers, strainers (Pl. XLIX, 1, a), great open pans and different types of storage jars.

The Roman temple, the house beside it, the Bath and the towers of the circuit walls revealed only the late types of pottery, but deeper digging outside the citadel wall, the excavations of the northwest tower of the citadel, and the clearing on top of the citadel mound showed earlier strata. A cut was made around the northwest end of the citadel to determine the nature of the foundations. The bed of earth and sand extended for some five meters to the bed rock which was found to have been cut for quarry stones presumably for the wall above. One great block was still lying near the place from which it had been quarried. The cut reveals a layer of pure sand and dirt almost a meter thick close to the wall and unmarked with sherds. Below this comes a stratum thick with sherds, separated from a second stratum by some 0.50 m. Almost a meter below a third stratum of sherds was found, below which stretched a long fill two or three meters deep with occasional sherds but no close packed layer. The quarry cannot reasonably be long anterior to the citadel walls, for it does not break the straight lines of the fortification. It may have been later; but it seems most reasonable to suppose it was made about the same time, both to provide stone for the fortifications above and to strengthen the means of resistance by the deep cut into the natural rock below the base of the wall itself.

From our own excavations at this point an immense number of pottery fragments of all sorts was gathered, showing that the newly-cut quarry had evidently been used as a convenient receptacle for broken and disused vessels almost from the beginning. A useful check on the stratification here was afforded by the work just north of the Roman



house where again the deposit was found to reach a depth of almost five meters before bed rock was reached. A valuable result of the determination of this stratification was the fact that the introduction of the red and black ribbed ware came comparatively late in the history of the city. Close to the walls this ware was found in quantity in the topmost stratum and scarcely at all below. The same situation was found north of the Roman house. Conclusive evidence on this point was furnished by the data in the northwest citadel tower and the clearing on the citadel top, for in neither place was the banded brittle ware found. Unfortunately we are not sure whether the citadel was abandoned when the great circuit walls of the city were built or only when the Romans came in. Since, however, this pottery was found in Samaria in Hellenistic times,<sup>1</sup> and it must have been introduced in Dura from the west, it seems most reasonable to conclude that it was brought in at the time of the coming of the Romans. Indication of its approach came earlier for, both in the tower and in the walls of room E of the Palmyrene Temple, scattered sherds of gray thin unbanded ware were found even though the true black and red banded variety was missing.

At the bottom of the tower and in the lowest levels north of the Roman house two sherds of relief ware were found, that from the tower representing a bunch of grapes, the other the long end of an acanthus leaf (Pl. XLVII, 1, a and b). Fortunately this Megarian type of pottery and its date are well known. We find almost exactly the same species of acanthus leaf at Priene;<sup>2</sup> Minns publishes one example from South Russia<sup>3</sup> and Zahn several more from the same region.<sup>4</sup> One of the bowls in the Yale collection<sup>5</sup> shows the same design, and a second very fine example comes from Samaria.<sup>6</sup> The grape bunch pattern is less popular but not uncommon as the bowls from South Russia testify.<sup>7</sup> Dragendorff<sup>8</sup> says that all the Megarian ware must be put at latest in the second century before Christ and this *terminus ante quem* gives us a most valuable criterion for our stratification at Dura.

<sup>1</sup> *Samaria*, pp. 299-300.

<sup>2</sup> Wiegand and Schrader, *Priene*, 1904, p. 403, 20.

<sup>3</sup> E. H. Minns, *Scythians and Greeks*, 1913, 352, Fig. 258.

<sup>4</sup> *Jahrbuch*, XXIII, 1908, pp. 46, 1a; 53, 8; 55, 13; 57, 15 and 16.

<sup>5</sup> Baur, *Stoddard Collection of Greek and Italian Vases in Yale University*, pp. 125 ff.

<sup>6</sup> *Samaria*, Pl. 72, a.

<sup>7</sup> *Jahrbuch*, XXIII, 1908, pp. 50, 5 and 54, 11.

<sup>8</sup> Dragendorff, "Terra Sigillata," *Bonner Jahrbücher*, XCVI, 1895, p. 31.

With the sherds of Megarian ware in the northwest citadel tower and the lowest levels north of the Roman house, occurred sherds marked with shallow grooves or incised lines (Pl. XLVII, 1, c and d), rather similar to the markings found on red glazed vessels at Samaria.<sup>1</sup> At Dura the sherds are made with a red wash over a pink paste, evidently in imitation of the finer glazed ware. The decoration of incised lines is also found among the *faïence* vessels from Nippur in the Pennsylvania Museum. Continuation of black glazed vessels at this time was proved by the discovery of a fragment in the low levels not far from the Megarian sherd, a fragment with a design partly scratched, partly painted on the surface (Pl. XLVII, 1, e). The same type of decoration partly incised, partly painted with opaque, white, yellow, and pink was found at Samaria and made a distinct class among the black glazed varieties.<sup>2</sup> As a matter of fact the black glaze seems to have continued at Dura, as fragments of such pottery are found even on the surface. They are, however, rare, and the glaze is of very poor quality, thin and flaky.

Fisher found a change in the types of clay and glaze at Samaria, a hard, fine, light-red paste with lustrous black slip for the first and best period, giving way to a fine, soft, gray paste with lustrous or semi-lustrous black slip, and this in turn supplanted by a fine, hard, red paste, but without the character and beautiful surface of the first quality.<sup>3</sup> We seem to have exactly the same development at Dura, the most common variety being that with pink paste and rather poor surface, though a few examples of really fine lustrous glaze occur, as we shall see, in the most ancient part of the settlement. The vessels were all undoubtedly imported and apparently came from the same source as those at Samaria. At Dura the great majority seem to have been plates or small saucers. Sir Aurel Stein suggests this was the most common form of imported vessels because such shapes were easier to carry in bulk, and certainly the difficulty of the long portage over the desert to Dura makes this explanation a most satisfactory one.

The plate shape, generally with a low base, is the common form also for another type of imported ware, the red glaze, found at this period at Dura. The paste ranges from gray-white to pink very finely made and covered with a fine, though not very lustrous glaze, most commonly a red with suggestions of brown on a surface showing uneven coloring to close scrutiny. Fisher brings the black glaze down to 150 B.C., at Sama-

<sup>1</sup> *Samaria*, pp. 305, 11; 307, 4 and 5.

<sup>2</sup> *Ibid.*, p. 294, 5.

<sup>3</sup> *Ibid.*, p. 292.

ria, after which period the red wares become prominent.<sup>1</sup> His note on the red ware is a most valuable contribution to our knowledge of the chronology of this type and bears repeating. "But similar pottery (the red glaze)" he says "was found under other unmistakable conditions,—under the street floor in S<sub>3</sub>, in the street cistern (coins of 200–150 B.C.) and under the floor in L.T. It is, therefore, certain that this beautiful red-glazed pottery was in use during the second century B.C., if not earlier. Wherever Megarian potsherds were found, the red-glazed ware was found, but where the one occurred in abundance, the other was comparatively rare. Thus while the Megarian vases come down into the second century B.C., the latter part of that period is dominated by the red-glazed pottery."<sup>2</sup> His types with the paste ranging from light yellow to light red, and the glaze generally dull correspond exactly to those at Dura, and make the occurrence of the ware at Dura a valuable means of dating.

The majority of both black and red glaze sherds were found around the palace foundations on the citadel top. Scattered fragments, however, were found at various levels throughout the site and even on the surface of the ground. The ware was evidently not common, however, at any period in Dura, and to take its place imitations were made by the local potters. So there was found both in the northwest citadel tower and in all the lower levels outside the citadel wall a great mass of sherds made of the common yellow and pink river clay, and covered with a red or black slip. The finest of these vessels show a reddish or gray-black clay, sometimes with added slip, highly lustrous. The gray-black vessels seem to go back to the earliest period and continue through all the occupation of Dura. Similar sherds were found even in low levels at Ashura. The red, however, seems to be direct imitation of the red glaze, to have come in only when red glaze vessels were imported and to have given way, as the red glaze did, before the increasing popularity of *faïence*. Another type related to this same general class, was vessels of yellow clay covered with a red or black slip, the black so thin and poor as to be only just distinguishable after its long stay in the earth. A final type links this class with the plain yellow but not inelegant pottery which had gone before. This is the class of finely made yellow bowls, cups, and plates decorated with a band or bands of red about the edge. The color is not always carefully applied and runs down in little drops along the

<sup>1</sup> *Samaria*, pp. 292–293.

<sup>2</sup> *Ibid.*, p. 304.



surface of the vessel as we find is sometimes the case at Priene.<sup>1</sup> It is very interesting to see that in this early period a very thin, carefully made type of ware is made from the common clay, sometimes adorned with red bands, sometimes plain; and that with the introduction of the glazed ware, and (somewhat later) of the *faïence* vessels this gives way and only the heavier, less delicate type of yellow clay ware is retained.

As has been said, the potter's shop, the towers of the circuit wall, the Roman Baths, and private dwellings gave us the pottery of the last period of the city; the northwest citadel tower and the deeper excavations outside the wall supplied us with the varieties down to the second century B.C.; there remained only the third century B.C., the first century of the occupation of the site. Fortunately the clearing of the citadel top brought to light pottery of this period also, for the fine black glaze plate and the wheel-made black glaze lamp left no doubt but that we were in the early Hellenistic period. This plate with its fine lustrous glaze and light-red paste shows just the type and form of Fisher's first black glaze style; its ornament of palmette and stem was identical with plates from Samaria. Most valuable evidence this was for it showed we had reached the earliest stratum at Dura and allowed us to reconstruct the sequence of types used in the complete period of the city's existence.

Tentatively, then, we can reconstruct the ceramic development at Dura. The Macedonians imported the finest types of black glaze vessels and Megarian bowls to supplement the thin, fine yellow ware of local potters. But imported black glaze wares deteriorated, the Megarian bowls were given up at the end of the second century and the importers tended more and more to change to the red glaze vessels. Meanwhile local potters with red and black wash and polish were imitating the imported wares; they continued to make of yellow clay a rather fine, thin type of bowl and saucer. In the first century A.D., perhaps even before this date, *faïence* was introduced by the Parthians and became increasingly popular as the method was applied to local vessels and the ware became cheaper. Finally perhaps only in the Roman period a new type of brittle banded, black and red ware was introduced especially for cooking pots and pitchers. This with the *faïence* became most popular and drove out all but the less delicate types of yellow ware.

There remains only one other type of ware, a species of larger vessels made of brown river clay, never lined with bitumen, and decorated with broad brown-red bands. It is found almost entirely on the surface or the

<sup>1</sup> Wiegand and Schrader, *Priene*, p. 422, Fig. 539, 6.

topmost layers of deposit. One is inclined to think at first that it is the result of later occupation or the remains of wandering Arab tribes. This seems borne out by the lack of any such pottery in the potter's shop. Sherds were recovered, however, from almost every section of the city, and the location of several, even on the dump heaps, postulates a period when the regular dumping places were still in use. Sarre found the same ware in Halibiyeh-Zenobia, Zalubiyah, Suriyyah, al-Sinn and even on the Tigris at Tell Kushaf and assigns the fourth to the sixth centuries A.D., as its period of distribution.<sup>1</sup> We know that a small force of Arabs occupied a corner of the citadel some time after the destruction of the city. Pottery from one of their graves allocates this period, however, to the ninth century,<sup>2</sup> and the lack of any quantity of the painted brown ware in the citadel precludes the possibility of its presence being due to this settlement. Most reasonable it seems, to see its introduction at the very end of the occupation of Dura, and to assign its first distribution to the last half of the third century. Unfortunately no sherds large enough to enable one to determine the shape of the vessels were discovered. The shape seems to have been in general a wide bellied vessel with a decided bend at the shoulder. The chief designs were the straight broad bands, the net pattern, loops, and in one case a broad pointed leaf and stem.

## 2. *Lamps.*

Most of the lamps were of the Roman period, as might be expected, but enough of other types were recovered to show the different periods and styles and to give us a most valuable criterion for dating. Earliest evidently was one of black glaze from the palace foundations on the citadel top. It came from the period before the molded lamps, having been made on the wheel. It falls, obviously, with its lustrous black glaze, its fine gray paste, and wheel manufacture into Fisher's "Greek" type (Pl. XLVIII, 1, No. 315).<sup>3</sup>

The importation of molded lamps must have followed quickly that of the black glaze, for only one of the first type was found. The second class brought two examples of Fisher's first division of Hellenistic lamps, the gray lamp with poor black slip, ornamented with relief pattern, and distinguished by a small knob on the side and a rather long

<sup>1</sup> Sarre, *Die Keramik im Euphrat- und Tigris-Gebiet*, p. 12.

<sup>2</sup> See *Rep.* I, pp. 72 ff.

<sup>3</sup> *Samaria*, p. 318.

nozzle.<sup>1</sup> Both the Dura examples came from the top of the citadel (Pl. XLVIII, 1, No. 313).

Meanwhile the wheel-turned vessels had not been given up, as a series of types, apparently of local manufacture, showed. Now, however, the turned lamp follows no longer the western but eastern or Parthian type. Two varieties were found, one a large rather clumsy looking type of brown clay (Pl. XLVIII, 1, No. 312) with wide opening on top, the shoulder marked with a series of knobs; the other of finer yellow clay more delicately made and smaller, often with a very small handle falling from rim to shoulder. The best example of the first type was found in the fill beneath the little Roman temple, while a nozzle of one of exactly the same type was found on the citadel top. Several parts of the second type were found on the citadel though no lamps were perfect. A parallel for the shape of the first occurred among the glazed ware in the museum at Bagdad, and Mr. Smith writes me that the type is common in the East. The second shape better made and with small rounded handle on top has many examples among the unpublished glazed vessels from Nippur in the Pennsylvania Museum. The first excavations of the Main Gate in 1928 brought glazed examples of a modified form of this same type, the wide mouth, the rolled top, the prominent nozzle and the manufacture on the wheel all being characteristic attributes of the class (Pl. XLVIII, 1, No. 317). It would seem that the coarser, clumsier type with the poor clay came in first, was adapted by local potters to the finer yellow clay, then glazed in the later period when the *faïence* became common.

The common type in the Roman period was the round molded variety (Fisher's Roman Lamps I)<sup>2</sup> with depressed center, narrow mouth and frequently a molded design, grapes, a wreath, an animal, running around the opening (Pl. XLVIII, 1, Nos. 310 and 314). The shapes differ a little, sometimes having a rounded handle at the end and a slightly elongated shape, sometimes scarcely breaking the round of the shape to make the nozzle. The type in any case is unmistakable.

### 3. *Storage Jars and Coarser Wares.*

M. Cumont has given excellent representations of the most common types of storage jars and coarser wares at Dura, the long grain jar (Fouilles, Pl. CXXIII), the wider containers, some with narrow (Pl. CXXIII, 6), some with wide mouths (Pl. CXXIII, 4), the amphora

<sup>1</sup> *Ibid.*, pp. 319-320.

<sup>2</sup> *Ibid.*, pp. 322-323.



stands (Pl. CXXI, 7) and the large bowls with depressed edge for pouring (Pl. CXXI, 4). Parallels for these types were all found in the last season's excavations. In addition were found large bowls probably used for grinding grain,<sup>1</sup> and rhyton shaped vessels. In the storage jars the common types of top are those almost without neck and without handles, and those with narrow taller necks with double handles falling to the shoulder. To this may be added a third, that with fairly high neck, a mouth of about 0.15 m., and broad handles falling from below the lip to the shoulder, a type on which the stamped designs were commonly found.

But these varieties, the most common, and apparently the only ones in use during the final years of the city were not the only ones we find at Dura. On the citadel itself three storage jars were found, their tops intact. These had the general shape of the others but differed materially in the shape of the neck and lip so that they are at once distinct from the rest. The neck rounds up from the shoulder, reaches forward like the others but stops without the curve or flare outward to make a fairly narrow mouth. Just at the mouth itself the clay is bent back to double the width of the lip. Then the top is flattened out and slightly rounded back, giving a little the effect of a crown or circlet placed around the neck proper. It is interesting because, though we have found examples only on the citadel at Dura, the little Tell Simbal across the river yielded two from the surface, a fact which suggests its epoch as that of the Parthian or Seleucid period, not of the Roman period. No sherds with stamped designs were found on the citadel.

Across the river on the same tell several pieces of coarse pottery adorned with the wave and comb bands were found. These types of ornament had been used from time immemorial along the Tigris and Euphrates as the pottery from Nineveh, Assur, and Babylon show. It seems reasonable to suppose, therefore, that they were introduced at a very early date into Dura; and the comb band patterns on the fine ware at the lowest levels confirms this opinion. On the other hand indication from pottery on the citadel that the stamped ornament did not appear till later seems borne out by the lack of this type of design in the coarse ware from low levels outside, and it may be that this decoration was not introduced until the Roman period.

With the large jars must be mentioned the stoppers or corks, with which they were closed. These are in general of plaster, though occa-

<sup>1</sup> Cf. Cagnat and Chapot, *Manuel d'archéologie romaine* (1920), II, 434, Fig. 632.

sionally of sun dried clay, have a rounded half-spherical shape beneath to fill the mouth of the pot, above a larger covering of plaster to cover the lip, sometimes a rough handle in the shape of a band raised six or eight centimeters above the surface for easy grasping. The most elaborate have, besides, additions at the sides designed to fit down over the lip, giving somewhat the appearance of ear flaps suspended from a well fitting cap. One has the bottom of a round vase attached to a piece of plaster to make the stopper proper. They differ in size as one might expect from those designed for a jar of 0.215 m. to one of 0.075 m.

Only one differing from the usual run, in shape and fabric was found. This was made of baked clay, a well rounded disk 0.092 m. in diameter and 0.01 m. thick on top, the bottom carefully rounded out. Near it was the mouth of the vessel, so near that the two must have been together when the jar was broken by the weight of the earth above. Both are made of the same type of clay, a sandy, not very carefully sifted, or carefully baked, reddish yellow. But the neck and lip of the vessel also differs materially from the ordinary run, for the neck is very narrow, the opening being only 0.031 m. Above it widens out and rounds over, in general like the mouths of the coarser vessels found on the citadel. It gives us then apparently a useful indication of the time of this style at Dura. The mouth measures 0.115 m. in diameter, furnishing a graceful shape as well as a more convenient opening for the receptacle. The stopper is made for a jar with mouth approximately 0.075 m. across, but the rounded projection extends less than 0.02 m., not enough to reach the narrow part of the neck, and the stopper though loose seems to fit as well as one expects, completely covering the top, the stopper proper beneath resting loosely in the widening top. Both these differ so strikingly from the ordinary type; we have so many of the other kind with which to compare it, that we must conclude that it is of another epoch in the time of the city or an importation. Against the latter may be set the kind of clay which can be paralleled by many vessels at Dura. The objects were found 3 meters down in the trench west of the northwest citadel tower; by no means at the bottom for there was half to a full meter more before the rock was reached, but far enough down to make probable that this vessel, made of an earlier type, had lasted on to be found among those of later design. Apropos of the lower levels in this same cut it may be said that many of the coarse sherds had a distinctly darker color than later ones, a dark brown surface and brown clay, almost like dry river mud as if they had never been baked sufficiently to deprive them entirely of their original color.

But if all these can reasonably be put down as local products because of the general similarity of the material, we must make an exception for two types not common but by no means rare at Dura; a type of clay with a bright orange coloring, the surface sometimes covered with a yellow wash; and a red clay extremely finely sifted, well baked, and strong, a biscuit which sometimes has in succession red, smoky black, and brown, at different points of the same cross section. The orange colored sherds are less finely sifted, though in general made with less sand than the common type at Dura. Both were found chiefly in the citadel and the lowest levels just outside; occasionally a sherd almost orange in color is found near the surface but they are very rare at this level. It seems fair to assume, therefore, on the basis of our present knowledge that at the earlier period—a period in which the citadel palace was inhabited—either a finer technique in the manufacture of this type of pottery was known at Dura or the vessels were imported; that after that time the trade was given up. But it was just this type of very fine clay that is characteristic first of the larger Assyrian vessels, then of the general Mesopotamian wares. The orange clay was found in some of the lower levels at Ashurat, at the time when the town was either an Assyrian or a Parthian village. It seems reasonable to conclude, therefore, that when the citadel was inhabited, there was an importation of pottery from across the river in considerable quantities; but that at a later period, certainly some time after the walls were built and perhaps just when the Romans came in, this trade was given up.

Finally an interesting feature is the development of other ornamental features in the way of elaborate handles, molded designs, etc., in the larger types of pottery. Here best we can see the direct influence of the fashions in fine ware reflected in coarse ware. We suspect such an influence in the comb bands, the series of close small lines running completely around the vessel; but we have no parallel for the wave line and very few for the stamped designs on the finer type of ware. The influence then at first was not marked. The introduction of *faïence* brought a distinct change, probably because the designs in *faïence* vessels were peculiarly adaptable to coarse pots. Ornamentation was not in general applied to the *faïence* itself but to the clay beneath. The clay was often not of the best quality, nor very finely baked, and the ornaments must be of a nature to show through the coat of *faïence* on the surface. The ornaments must, therefore, be largely simple in design, not particularly fine in detail and easy as a general rule to execute. With these restrictions



it is rather surprising how wide a variety of designs the new ware attained. One of the most common types of design was the band or circlet of oval depressions placed around the vase like links of a chain. It is an easy design to render, a band around the vessel being pressed with the finger or a small instrument until successive impressions are made completely around. The knob or protrusion was a necessity to hold the vessels apart while baking, but it was soon taken up as an ornament to vary the plain surface of jar or plate, was placed where it had no practical advantage, was widened and flattened out to become a disk a centimeter or so in diameter. Then came apparently the medallion; at first just an oval circle on the side of the vase, sometimes with the suggestion of human features appearing through the opaque surface, finally developing into a real portrait or figure in relief. Most of all was attention directed to the handles. These were apparently always a prominent part in the typical *faïence* vase; large, tall, and ranging in number from two to four. A twist was the first variation bringing a very pleasing effect and one easily appreciated, enhanced as it was by the coat of opaque *faïence* applied to it. Then the back of the handle was divided in two, the halves not separated but rounded out to give the effect of a double bar, then both halves were twisted to give an even more elaborate effect, finally the lines ended not with the handle itself but spread out fan shaped to lose themselves gradually in the wide surface of the *faïence*.<sup>1</sup> In this development of elaboration the coarse ware followed as well as it could. We have splendid examples of the twisted handle; examples of the double, almost a triple handle, for some of the broadest are divided by two lines, though the effect of the rounded bar is not carried out in full. But the double handle with the twist was not as far as we know attempted. Simpler ornaments were even more common; the finger mark chain pattern being a most common design, not only around the body of the vessel, but around the rim or just below to give a light wavy effect to the usually stolid top. One very good handle shows us the lines of the end spread out in relief pattern to imitate the claw of a bird grasping the body of the vessel. That these innovations were the result of imitation of *faïence* styles, is very clearly shown in the reproduction on coarse vessels even of the little knob or protuberance which was so characteristic of the *faïence*. These little buttons were a practical necessity in *faïence*; they were useless in the coarse ware; their artistic value even in the more elegant type was of very doubtful value; on the coarse ware

<sup>1</sup> Cf. No. 17.100.2069 in the Metropolitan Museum.

they took the appearance more of a sort of wart than of anything else. Yet there they were and in the end they do serve a useful purpose for they supply us with the missing link; the sure proof of the direct relation between the two. The pie crust edge was not uncommon at the lip of coarse vessels. In the *faïence* we have not found such a design this season, but in the finds from Dura at Deir-ez-Zor is found a shallow bowl of beautiful *faïence* with the wavy line of the pie crust edge completely around the rim.

In the excavations of 1928 parts of a clay lantern were found. The fragments, including the handle and much of the sides, allowed a reconstruction (Pl. XLIX, 2, b). As the handle shows, it was held in a horizontal position; and soot from the candle or lamp within, marking not the inside of the handle but the perforated top, confirmed this hypothesis. One side was left unperforated to shield the lantern entirely from the wind. The light was introduced probably through a hole in the bottom. The clay is the pink, sandy, river clay of the kind commonly used by the local potters.

In the east room of the south tower of the Main Gate there were recovered almost all the fragments of a great storage jar. These, when pieced together at Yale, permitted accurate measurements of the vessel to be taken (Pl. XIV). It is almost exactly as high as it is wide, 0.79 m., built up by hand to a thickness varying from 12 mm. to 20 mm. It is ornamented around the shoulder and neck with leaf and swastika stamps as well as with wave bands and punched circles. The mouth, 0.38 m. wide, is bordered by a thick, flat rim 0.035 m. wide and 0.02 m. thick. From this there falls not quite vertically a neck 0.15 m. high, set with four broad handles 0.12 m. by 0.08 m. marked into five bands. The handles reach from just beneath the rim to the shoulder. The bottom is flat, 0.20 m. in diameter, with no base. The jar was apparently of the type designed to contain grain or other material requiring a large mouth. When found, this jar still held a number of crude bricks with which it had been filled.

#### 4. *Stamped and Scratched Pottery.*

BY SUSAN M. HOPKINS

The stamped ware found during the season of 1928-29 is of two kinds, glazed and unglazed. Of the first we have only four examples, of which three are plates of fine black glaze bearing small, delicately made stamps in the following designs: (1) palmette, (2) *fleur-de-lis*,

and (3) conventionalized flower resembling a hyacinth and rendered more realistic by the addition of incised leaves and stems.<sup>1</sup> The fourth example is the base of a small bowl covered with a slip of an uneven red-black color. The design, which occurs on the interior of the bowl, is made up of five circular stamps 0.007 m. in diameter irregularly arranged in a rough circle, the pattern of the stamp itself consisting of a series of tiny dots ranged about a central dot. The workmanship and color of this piece suggest that it was probably an attempt at local imitation of the imported product, a hypothesis of some interest in view of the occurrence of the same design on a fragment of common, unglazed red clay.

All other stamps occur on unglazed ware and fall into two distinct classes, inscriptions and designs or devices. The inscriptions, of which there were five examples, three on amphora handles and two on shoulders of vases, belong to the common type so well known in the ancient world from the Hellenistic period till late Roman times.<sup>2</sup> One example, which fell in the groove formed by two low ridges on a red clay handle, consisted in reality of two separate stamps, one rectangular bearing the name *Ευλαλι* and above it a circular stamp 0.011 m. in diameter on which Mr. Johnson reads *ΕΥΛ*, a repetition of the same name in abbreviation. Another handle also from a red clay amphora read to the break *.PN*. The third, from a yellow, bitumen-lined pot, read in irregular letters *ABPO* with the *B* and *P* facing left instead of right. Of the stamps on the sides of vases one, which occurs in combination with a coarse scratched inscription, may better be discussed elsewhere. The second, also fragmentary, bore portions of two stamps, one a very elaborate and well-made circular floral pattern 0.05 m. in diameter, and the other an inscription of which only the letters *AIOC* remain. It is undoubtedly the ending of a proper name.

The remaining stamped pottery, i.e., those examples bearing designs or devices (Pl. XLVII, 2) may be divided into a small number of groups according to their patterns. There are twenty-nine examples on which leaves or branches appear alone, thirty-three with wheel patterns or flowers highly conventionalized, four with swastikas alone, six with circles containing a cross and dots, twelve with a combination of leaves and flowers, five with swastikas in combination with other single de-

<sup>1</sup> For a discussion of the date of this ware see pp. 37 and 39 above.

<sup>2</sup> Walters, *History of Ancient Pottery*, 1905, I, 154; A. Dumont, *Inscriptions céramiques de Grèce*, 1872.



signs, and five with miscellaneous designs, of which one is an exact duplicate apparently of Cumont, Pl. CXXIV, 4. Nearly all are very simple in conception and crude in execution. The question then arises: what was their purpose? They occur invariably on pots of common, unglazed clay, from which fact it may be inferred that they were used to indicate the contents of jars used in commerce. Some such meaning is, probably, the explanation of many of the isolated letters and figures found scratched on the sides of vessels; and it may very well be that jars bearing certain single stamps, such as the palm tree found by Cumont, may have been marked in this way to facilitate identification in buying and selling. On the other hand, a fair proportion of the designs found and certainly a much larger proportion of designs as they stood intact on the jars (for many were in a very fragmentary condition when found and represent far too small a surface to enable us to judge of the whole vase), consisted not of single stamps but of two or more in combination, so that their meaning, if they had any, would have been ambiguous. Moreover, the fact that the same devices occur on other objects makes it appear highly probable that, in general, their purpose was simply ornamental. The rosette or conventionalized flower is found in a pierced design adorning a small shoe now in the Yale Art Museum (Pl. X, 1); and the typical Dura leaf or branch pattern occurs on a decorated clay stand from the neighborhood of Warka, published by Professor R. P. Dougherty.<sup>1</sup> It is extremely unlikely that the same design would be used sometimes with and sometimes without a meaning, yet these two designs constitute the bulk of those found on pottery at Dura.

Closely bound up with the question of the use of stamps for identification of commercial products is the problem of distribution of designs, since labels would be of great importance if the jars were to be transported and if the labels were universally intelligible. It lies open as a challenge to the future archaeologist to find identical stamps on different sites in sufficient quantity to establish proof of transportation for commercial purposes. At present, however, we have abundant evidence that similar designs were used in various widely scattered places and, probably, in widely different periods. The chronology is very confusing but the similarity of sherds from different sites is striking, though much of this similarity, I am convinced, is due to the lack of skill on the part of the makers and to the nature of the designs themselves, most of them being so simple that they might well have developed independently in

<sup>1</sup> *Annual of American Schools of Oriental Research*, VIII, 1926-27, p. 48.

different communities. No patterns consisting solely of concentric circles and no star patterns were found at Dura. The rosette form, however, consisting essentially of circles, dots, and rayed lines, is very common and is to be found likewise at Nippur,<sup>1</sup> Al-Bahri Shargi,<sup>2</sup> Abu Hatab,<sup>2</sup> Assur,<sup>3</sup> Babylon,<sup>3</sup> and Samarra;<sup>4</sup> and the more developed flower form in Nippur,<sup>5</sup> Palestine,<sup>6</sup> Kashshaf,<sup>7</sup> Birs Nimrud,<sup>8</sup> and Charsada<sup>9</sup> in northwest India. The rough leaf is to be found at Nippur,<sup>10</sup> Charsada,<sup>11</sup> Assur, and Babylon.<sup>3</sup> An egg design from Dura is very similar to one found at Tekrit.<sup>12</sup> All of these designs probably occur at many other sites also; but the places mentioned are sufficient to show that there was a certain relationship in design over a wide area and that Dura was by no means alone in her use of the above mentioned patterns. Perhaps the most interesting of the Dura devices, however, are the swastikas and the circle with cross and dot. Pl. XLVII, 2, shows one example of the cross and dot design which occurs also at Nippur,<sup>13</sup> Tabus,<sup>14</sup> and in Palestine.<sup>15</sup> It is of interest in that, while there is divergence, the elements remain the same at such widely separated sites. Moreover, such a device was actually found by the Princeton Expedition in Syria as a church decoration,<sup>16</sup> though Sarre says of the example from Tabus that, since it occurs on "spätantike" vases which he else-

<sup>1</sup> Nos. 388, 412, 430 in the forthcoming catalogue of terra cottas of the University of Pennsylvania Museum.

<sup>2</sup> Sherds from these two sites are in the private collection of Professor R. P. Dougherty of Yale University, who kindly gave me permission to refer to them.

<sup>3</sup> For information about Babylon and Assur I am indebted to the kindness of Professor W. Andrae.

<sup>4</sup> See the finds from Samarra in the Metropolitan Museum of New York.

<sup>5</sup> Nos. 407, 410 in the forthcoming catalogue.

<sup>6</sup> F. J. Bliss, *Excavations in Palestine*, 1898-1900, Pl. 56.

<sup>7</sup> Sarre, *Die Keramik im Euphrat- und Tigris-Gebiet*, 1921, p. 14.

<sup>8</sup> I myself picked up a sherd of this type on the site at Birs Nimrud.

<sup>9</sup> Marshall and Vogel, *Archaeological Survey of India, Annual Report*, 1902-03, p. 182, 9, 16, 17.

<sup>10</sup> Nos. 398, 393 in the forthcoming catalogue.

<sup>11</sup> Marshall and Vogel, *op. cit.*, p. 182, 10, 11.

<sup>12</sup> Sarre, *Die Keramik*, Pl. II.

<sup>13</sup> Nos. 395, 419 of the forthcoming catalogue of terra cottas of the University of Pennsylvania Museum.

<sup>14</sup> Sarre, *op. cit.*, p. 15.

<sup>15</sup> Bliss, *Excavation in Palestine*, 1898-1900, p. 40.

<sup>16</sup> *Princeton Archaeological Expeditions to Syria*, 1904-05 and 1909, Div. III, Sec. A, p. 57.

where defines as "palmyrenisch," the design can have no connection with the Christian cross.<sup>1</sup> The peculiar form of the Dura swastikas and the frequent occurrence of dots with them suggested a connection between them and the cross and dot design, a connection which becomes apparent if we merely prolong the arms of the swastikas. They, then, become circles with cross and dot or squares exactly like the half-complete square found by M. Cumont. The designs take on an added significance in view of the fact that Professor Andrae has found exactly such quadrilateral designs on vases known to be of the Parthian period.

The problem of chronology is a vexing one, for there can be no doubt that the technique of stamping pottery was a very early one in Mesopotamia and that it was also a very late one, having continued at Samarra into the third century of Islam<sup>2</sup> and elsewhere till the twelfth and fourteenth centuries.<sup>3</sup> Moreover, it seems that sometime in the interval the art had spread to Europe where it appears in the Balkans and the north in the fifth century.<sup>4</sup> And, again, stamped ware appears on the surface of mounds in India in a period identified only as pre-Mohammedan<sup>5</sup> and is found sporadically even in Central Asia.<sup>6</sup> It is possible that some at least of the Dura patterns may date back to the early days of the city, though the fact that most of the examples were found on or near the surface of the ground makes this supposition improbable. The single important exception is a large vase of gray clay found in pieces on the floor of the southeast tower-room of the Palmyrene Gate. This has been restored by Mr. Jotham Johnson (Pl. XIV). The design consists of a pointed modification of the common wave pattern about the collar of the vase and on the shoulder a row of punched circlets above a row of alternating swastika and leaf stamps. The fact that it was found on the floor level of the tower shows either that it was in use at the time of the destruction of the city or that it was placed there subsequently but before the roof and upper stories of the tower collapsed. The latter hypothesis presupposes some sort of settlement on the site after the destruction of the city, a supposition pretty well precluded by the general distribution of the ware over the site, as would scarcely be the case if the city had been occupied by a mere handful of inhabitants. Moreover, the jar is of

<sup>1</sup> Sarre, *op. cit.*, p. 15.

<sup>2</sup> *Ibid.*, p. 14.

<sup>3</sup> See stamped pottery from Syria in the Metropolitan Museum of New York.

<sup>4</sup> Dechelette, *Les vases céramiques ornés*, II, 328 *et seq.*

<sup>5</sup> Marshall and Vogel, *Archaeological Survey of India, Annual Report*, 1902-03, p. 181.

<sup>6</sup> Stein, *Serindia*, Pl. XXXVI, L.A.0012.



too good a quality and too large a size to have been carried about by nomads. Hence, it is most probable that it was made locally at a time when the city was still large enough to maintain a skilled potter. If, then, Dura was destroyed as now seems probable shortly after the middle of the third century A.D., we cannot but conclude, tentatively and subject to later modification, that stamped ware was in use at Dura in the early third century A.D.

All of this ware, of which we found 111 examples during the past season, is, as has been before noted, of unglazed clay, ranging in color from a pale yellow-white through gray, brown, pink, and red. There is a tremendous variation in the quality of the clay as well as in the sharpness and delicacy of the design. No complete pots were found with the exception of the broken amphora above mentioned from the southeast tower-room of the Palmyrene Gate. A number of fragments, however, are of sufficient size to show clearly that one very common form of the stamped pot was the wide-mouthed storage jar. The collars in jars of this type seem to range in height from 0.03 m. to 0.06 m. Still another type has handles reaching from just below the lip to the shoulder.

Frequently it happens that stamps do not constitute the whole of the design. There are often comb bands, single wide bands, wave bands of all kinds, punched semicircles, punched circlets, and roughly made tooth-like indentations. Coarse pottery may bear also by way of decoration triangular impressions made with a punch, barbotine bands applied at the rim and below, often decorated with finger prints or with rough claw-shaped marks, small buttons of clay applied to the surface and overlapping one another, and dots or fine lines made with a sharp instrument. The great difficulty is that several of these methods of decoration are still in use so that their presence alone confuses rather than clarifies the chronology.<sup>1</sup>

<sup>1</sup> Parallels to the Dura ware may be found in the following publications; Wave Designs: Seller and Watzinger, *Jericho*, 109; Stein, *Innermost Asia*, XLVIII; *Serindia*, Pl. IV, A.T.IV.1, Pl. XXXVI, L.A.VI.11, L.A.VI.11001b; Sarre, *Die Keramik von Samarra*, Pl. I, 1; von Le Coq, *Chotscho*, 65. Comb Bands: von Le Coq, *op. cit.*, Pl. 66h; Stein, *Innermost Asia*, XLVIII; Seller and Watzinger, *op. cit.*, 109; Stein, *Serindia*, Pl. IV, U.M.001. Semi-circular Punches: Sarre, *Samarra*, Pl. II, 2. Small Circular Punches: Stein, *Innermost Asia*, Pl. XXIII, C.XCVI. 01; *Serindia*, Pl. XXXVI, N. Finger Marks: Seller and Watzinger, *op. cit.*, 104; Stein, *Serindia*, Pl. XXXVI, L.A.VI.007. The Nippur collection in the University of Pennsylvania Museum contains examples of comb bands, wave lines, punched dots, tooth marks, and finger indentations.

Of more significance are various letters and devices scratched or roughly traced on the surface of vases while the clay was still wet. There is no attempt at effect; in fact, in many cases the presence of a double line proves the crudeness of the instrument used. Of the inscriptions there are two which are almost certainly names either of the makers or of the owners. Απολ (Pl. XIII, 1) on the side of a lemon-shaped vase may be an abbreviation of any one of the Apollo combination names so frequent at Dura. The second is shown in Pl. XIII, 2. A third example which may be a name occurs on a fragment of heavy, reddish clay and is chiefly remarkable for a double reading of the same inscription, once stamped, once scratched. The stamp is of inferior workmanship and reads clearly ΑΓΓ preceded by another letter which is probably Μ. Nothing else can be deciphered on the stamp but in large coarsely scratched letters we read to the left of the stamp Μ (with a small Η above it) ΑΓΓ and to the right an Α. Professor Rostovtzeff suggests that we have here another example<sup>1</sup> of the use of ἀγγεῖον as a unit of measure and reads ἡμᾶγγεῖον α. This reading seems to me to fall short of fitting the case, because it forces us to interpret the stamp in the same way, though the name stamp is the more common in antiquity. Moreover, I have been able to find no examples of the use of the abbreviation ΜΗ in this sense. But the most weighty objection in my opinion, is that the Α to the right of the stamp adds nothing to what precedes and has meaning only if it can be proved that the unit of measure was in reality a half ἀγγεῖον. I can, however, offer no interpretation of the letters ΜΗ though they are certainly an abbreviation similar to those of the μνησθῆ inscriptions, but I am convinced that had the vessel not been broken we should have been able to read in full the name Ἀγγαῖος which also occurs in a list of persons on the north wall of the pronaos of the Temple of the Palmyrene Gods.<sup>2</sup> Certain other inscriptions may also represent names.<sup>3</sup> In addition, there is a series of monograms<sup>4</sup> and a series consisting of a few letters each.<sup>5</sup> The repeated occurrence of the letter φ in Pl. XIII, 13-18, seems more than a coincidence; but I can offer no solution, since the inscriptions cannot be dates and the numbers are too large to warrant a hypothesis that the φ may be the initial letter of the

<sup>1</sup> N. Y. Clauson, *Aegyptus*, IX, 1928, p. 265.

<sup>2</sup> Cumont, *Fouilles*, p. 389, Inscription No. 27 1. 4. Cf. also Lidzbarski, *Ephemeris*, II, 3d part, 1908, p. 339.

<sup>3</sup> Pl. XIII, 3-7.

<sup>4</sup> Pl. XIII, 8-12.

<sup>5</sup> Pl. XIII, 3, 15, 17, 18, 19, 20.

unit of measure φορμός. More probable is Professor Rostovtzeff's suggestion that No. 19 should be interpreted as χοίνικες Δ. The χοίνιξ was a dry measure amounting to about three to four kotylae.<sup>1</sup> Still more probable is it, however, that an inscription in very irregular letters (0.02 m.—0.07 m.) marked with black on a sherd of red clay is an indication of measure.<sup>2</sup> If so, the meaning is kotylae 52. Since the kotyle was a liquid measure amounting to about one-half pint, the total capacity of this jar would have been about three and a quarter gallons.

In addition, there were several common devices scratched on pottery, i.e., a series of marks between comb bands, probably an attempt to represent the Roman number thirteen; a double triangle joined at the apices occurring six times, all on very large jars bitumen lined; and a series of crescents of different sizes also on bitumen lined jars. Finally, a plant design occurs scratched at length (0.115 m.) on a large jar where it may very well be an indication of the contents. Perhaps it was intended that the pot should contain palm oil or dates and this is a crude attempt to represent the characteristic leaf. This design is an almost perfect parallel to one on a vase found at Samarra.<sup>3</sup> Similar designs may be seen on two other vases from Dura, one bitumen lined, and, again, executed with some delicacy, on two and possibly three amphora covers.

### III. MINOR FINDS AND BUILDING DETAILS

#### 1. *The Citadel.*

That the earlier construction on top of the citadel hill goes back to the earliest period at Dura seems undoubted from the evidence of the pottery. The airplane view shows that the southeast wall of this structure is not quite parallel to the long wall protecting the southeast side of the citadel hill (Pl. XXIX). Probably its direction coincided less with the northwest wall for, as far as we can judge, these two great walls were not quite parallel, that along the cliff deviating a few points to the north as it runs toward the northeast. M. Pillet's plan of the early building on top shows that one strong wall, possibly two, ran along the southeast side (Pl. IV). The fine cut and finished surface of these stones, allowing them to fit so closely as to almost dispense with mortar, has been discussed in the chapter on building periods. The building may have been a Greek temple as the strong wall supporting a pillar, its

<sup>1</sup> Hultsch, *Griechische und römische Metrologie*, 1882, pp. 106, 625.

<sup>2</sup> Pl. XIII, No. 21.

<sup>3</sup> Sarre, *Samarra*, Pl. II, 1.



general direction to the northeast and its position overlooking the valley, suggests. The series of rubble walls linked to it, however, still plainly visible, makes the supposition of a palace the more likely one. If so it seems curiously weak, especially in contrast to the redoubt, from the point of view of defense, for the one strong southeast wall suggests at least one column and we have no evidence for strong side walls. There is just the possibility that the building was constructed at a time when the district was safe, and that at another period when the need for defense was more pronounced, the redoubt was built with stronger walls and improved methods of defense.

From this early palace apparently came the fragments of tinted plaster (red, yellow, and blue) found among the foundation walls, for the pieces were found only in the area enclosed by the older walls, largely outside the later series of rooms and they differed from plaster found still clinging to the walls of the later palace both in material and color.<sup>1</sup> There was apparently no design, for none of the fragments had more than one color. We must assume, therefore, that different rooms, or the walls and ceilings of the same room, had different tints. Here again the arrangements in Macedonian houses at Olynthus coincided with those at Dura.

The stones of the second palace, cut in the same way as those of the

<sup>1</sup> Dr. Walter Bradley of the chemistry department very kindly analyzed for me the binding material of buildings at Dura, as well as the plasters employed, tinted plaster carrying quartz pebbles from the early palace from the citadel, white plaster from the later palace, the bath and private houses. He has given me the following summary.

"The samples of plaster carried varying amounts of sand, some of the samples were white, soft and chalky, while others had the soft white mass partially covered with a fine brown powder.

"In practically all the cases where the samples were taken between the blocks the binding material proved to have been derived from gypsum rock since negative tests were obtained for carbonates and positive tests for sulphate and calcium.

"A gypsum rock obtained from a large cliff near Dura is still used for the making of plaster.

"Other samples taken from the citadel showed different physical and chemical characteristics from the foregoing plasters. The ground mass of these samples while similar in appearance to the plasters carried in several cases numerous colored quartz pebbles. Several of these samples had a delicately colored surface coating. One of the most striking colors of one of the coatings was a turquoise blue, which was found to be due to copper and cobalt. Other colors were red, black, and pale yellow.

"In making chemical tests it was proven that these samples from the citadel contained a carbonate and this together with the included pebbles makes it very probable that a different period used the lime in building operations."

circuit wall of the citadel, were in general laid in the same manner with alternate courses of headers and stretchers. Around the courtyard, however, and in the central wall built through the middle of the court, the broad face of the blocks was used. A similar style of construction is found in the side walls of the redoubt and in the older building of the tower of the Palmyrene Temple. In the two latter cases, however, the blocks present alternately the broad side and the narrow edge; on the citadel the course presents a continued series of blocks each presenting its broadest surface.

Analogy with Hatra perhaps gives us a valuable clue to the reconstruction of the building as a whole. At Hatra the room with the vaulted corridor is square and set at the rear of the palace. In our building on the citadel, one expects the room D to adjoin the courtyard, in which case one dimension can determine the size of the building as a whole and possibly the total length of the courtyard. Possibly also the wall running through the center of the court is similar to the transverse wall dividing the greater courtyard at Hatra.<sup>1</sup>

Close to the palace on the west side was found a large number of stone balls roughly cut twelve to fifteen centimeters in diameter and each several pounds in weight. They were used evidently in machines of war or simply as missiles thrown from the top of the walls or cliff at attackers. Similar balls were found in the fortifications of the Main Gate of the city, but in no such numbers as on the citadel.

Here might be mentioned the loom weights for they were made of sun-baked clay rather than pottery in the true sense. The two types common on the citadel were the pyramid shape and the double truncated cone. The pyramid type has a base 0.04 m.  $\times$  0.035 m., rises about 0.08 m., and ends in a top 0.015 m. square, the surface being rounded. Just below the top a perforation allows the passage of the thread. The double truncated cone type is smaller, about 0.03 m. long, 0.03 m. and 0.04 m. wide, and with the hole running from point to point. Whether the larger disks of sand-baked clay and plaster should be included in this group seems doubtful as the different shape and larger hole suggest a different type of instrument. It is interesting that of the loom weights found at Olynthus the most common forms were of the pyramid and double truncated cone types; those made in Olynthus were of baked clay, but of almost exactly the same size and shape.<sup>2</sup>

<sup>1</sup> Andrae, *Hatra*, pp. 122-123.

<sup>2</sup> Cf. loom weights from Samaria, *Samaria*, Pl. 68, g and l.

The most important single item among the minor finds on the citadel was that of a bronze plaque with the representation of the masque of Silenus (Pl. XXXVI, 2). The plaque is small, 0.048 m.  $\times$  0.037 m.  $\times$  0.006 m., but heavy, weighing four ounces. A little projection at one corner, 0.003 m.  $\times$  0.005 m., indicated that it was used as the cover of a box or niche in the wall, swinging on the little knob as hinge. In the center is a masque of Silenus 0.033 m.  $\times$  0.024 m. in relief. The heavy hair, made with broad incisions rounds up above the forehead framing with the beard the prominent round staring eyeballs and snub nose of the countenance. A full mustache droops to either side of the open mouth. The modeling is strong and sure; but the beard, less carefully cut, fades away into the plaque itself. This masque makes a most interesting contrast to the representations of masques cut on the walls of the great palace of Hatra.<sup>1</sup> In the latter place they are done in the purely Parthian style with rigid stylized hair and crude outlines; our own is entirely in the Hellenistic manner with careful drawing of expression and much more attention to realistic details.

The pottery, toilet instruments, and small ornaments, rings, etc., may more conveniently be taken up with similar finds from other parts of the site.

Proof that the citadel as a whole had been abandoned some time before the desertion of the city was furnished by discoveries in the northwest citadel tower. Here were found two skeletons in opposite corners and near the center the bones of a child in a large amphora. The fragments of pottery immediately around these bones left no doubt that the burials were made some time before the final years of the city's existence, apparently at the beginning of or before the Roman occupation. Abandonment and subsequent use as a burial ground explained the absence of everything of value. One could still see the ends of the massive beams which supported the upper stories, the reeds which had made the matting of the floors, but the lack of small finds was disappointing. One of the skeletons, however, was exceptionally interesting. It lay at full length in the northeast corner, the remains of a man a good six feet in height and apparently in the prime of life, for both bones and teeth were in extraordinarily fine condition. Hair and clothing had completely disappeared, but the end of a knotted cord still bound tightly about the neck and the wide gaping jaws left no doubt as to the manner

<sup>1</sup> Andrae, *Hatra*, p. 130.



of his death (*Yale Sc. Mag.*, Nov. 1929, p. 18, Fig. 3). Perhaps when the citadel was no longer occupied this strong tower had been used as a prison and place of execution. Later it must have been deserted entirely and so used as a convenient place for the child burial, not improbably in a period of siege when the cemeteries outside the walls were inaccessible.

2. *The Roman Temple and House Area West of the Citadel.*

The deposit above the floor level of the little Roman temple ranged from less than four feet at its maximum depth to something under two feet at the lowest levels. One might consider himself very fortunate, therefore, to find so much of the inscription dedicating the building still remaining. Of the statue mentioned in the dedication no trace remained. The plan of the building and the position of its columns and altar were plain from the foundations; additional finds gave us some knowledge of its ornaments. A good fragment of frieze showed us the egg and dart pattern separating a scrollwork pattern above from a meander and square pattern below (Pl. XXXVI, 1). The work is admirably done, with the grace and care characteristic of work of the Hadrian period at Baalbek. The piece confirms, therefore, the impression of the altar that the building was constructed early in the Roman occupation before the third century had introduced a tendency to carelessness.

The few pieces recovered indicated that only a small portion of the temple was so adorned. We know that on the west the temple linked with a private house, the wall between being common to both (Pl. VIII). Three sides of the temple stood clear; but it is quite probable that only the front facing down the long stretch before the citadel was ornamented. Fragments of plaster from the columns and walls inside showed the painting of the interior. Most frequent were traces of red and black bands, the red 0.08 m. or 0.10 m. broad, the black of 0.02 m. or 0.03 m. which must have run along the edges of the room. Near the altar a piece of plaster was found with the representation of a large irregular flower done in yellow and black paint. Other fragments showed a circle of green leaves perhaps a crown and a vague design of small green wavy lines running across the general surface of the wall. The work is very crude and coarse, a striking contrast to the delicacy of the frieze. It may be, therefore, that this interior decoration was a later addition. We may remark in any case its general similarity to the form of other Roman paintings we know at Dura, those of the Palmyrene Temple and the Baths. In all cases the broad red bands along the

edges block off the center, making perhaps large panels and framing the design within.

Foundations of a house excavated just west of the temple and evidently, as the pottery showed, of the Roman period, revealed a building similar in general plan to that excavated by M. Cumont. One enters first from the street a narrow corridor giving access to the isolated rooms E and F (Pl. VIII). Beyond this corridor lies the courtyard cut with minor walls and surrounded with a series of rooms. Two series of water pipes ran through the house; one, evidently the drain, of right-angled bricks laid to form a shallow trough and covered with loose tiles, extended from the center of the court toward the angle of the temple; the other of round pipes cut through the corridor just west of room G.

In the house the finds, as might have been expected, were chiefly household utensils of pottery and small bronze instruments, but certain ones call for special attention. Some quantity of window glass and mica was found in the courtyard A and in room B, a few pieces in room D and one or two smaller fragments in the little corridor running to room G. The largest complete piece was one of mica 0.138 m.  $\times$  0.15 m., and good sized fragments of both mica and glass suggested panes of this same general size. On the other hand several smaller panes were found complete, representative dimensions being 0.035 m.  $\times$  0.07 m., and a trapezoid 0.11 m. and 0.065 m.  $\times$  0.045 m. No complete panes of glass were found, but fragments were recovered as large as 0.08 m.  $\times$  0.07 m., and 0.10 m.  $\times$  0.06 m. It was evident that the rooms had been lighted from the court, the windows set with several panes of glass, the largest used for the windows of room B or possibly B and D together. Room G evidently had just a small window with mica panes opening on the corridor perhaps to give a view of the entrance as well as light.

Only the lower portions of the walls remained, but the plaster still in place in the corner room, room C, showed fresco designs, the color still wonderfully preserved though they had not been more than a few inches below the surface of the ground. The design in bright shades of green and red showed apparently the headdress of a man with crown of green leaves and the bottom of a high red tiara above. Fragments of fallen plaster showed again the broad red lines which bordered the room. Evidently this was the most decorative room in the house and its position in relation to the house as a whole is significant. We know that this house plan was the usual one at Dura, for the houses excavated by M. Cumont had the same general scheme; we know also that the plan

of grouping the rooms in this manner about a central court was a Macedonian one for we find exactly the same type at Olynthus. In Macedonia there were not the separate men's quarters and the cellar for excessive heat; the rest of the house corresponds almost exactly. But in Olynthus it was the corner room, not opening on the court that had the mosaic floor and the raised borders. Evidently not only the arrangement of the house as a whole had been preserved, but the tradition of the position of the chief room had remained intact. One descends to the cellar by three steps from room D. The compartment is very small, scarcely two meters long and a few centimeters more than a meter and a half broad. The low ceiling prevents one from standing upright, but a bench along the side half a meter broad allows reclining. Cumont believed that the cellar was utilized to combat the heat in very hot weather, but the retreat here could not have been very comfortable or cool for neither is the ceiling high enough to allow one to sit easily on the bench, nor is the bench wide or long enough to make a convenient bed, while the room as a whole must very quickly have become stuffy and hot.

Curious finds were those of single drain pipes in rooms G and B standing upright and unconnected apparently with any system. These seemed inexplicable till we realized that the light floor of clay and plaster had been dug through and these had formed the method of draining beneath. In the frigidarium of the bath just this type of drain was found, a single pipe upright allowing the water from the tiled floor to find an outlet and sink gradually into the dry earth beneath. Interesting it was also to see that at Olynthus the same type of drain was used, for the floors had small holes through the cement into which the water used in cleaning could run. These two pipes probably explain similar single pipes in rooms D and C, pipes which in these cases had fallen on their sides. The pipes measured 0.275 m.  $\times$  0.17 m. and 0.275 m.  $\times$  0.195 m.

Just outside the house, but touching room G, close to the corridor lay a magazine of five great jars, all upright and almost intact. Here evidently was the storeroom of the house, though there was no indication of how it was linked to the building as a whole. Possibly there had been a trap door and a small doorway leading out directly from room G. Room G had evidently been the pantry, for the fragments of pitchers and vases were most common here. Just north of the west end of the house (in a position somewhat corresponding to the position of the magazine at the south end) was found a square block of stone something



over 0.30 m. to a side and 0.06 m. or 0.07 m. thick. It had a hole two or three inches in diameter through the center and grooves from the sides leading to this opening to facilitate draining. From modern analogy as well as ancient parallels it was easy to recognize the floor stone of a latrine or water-closet. Whether this belonged to the house in question or to the group of rooms on the other side of the street it was not possible to tell. It might be, however, that an adjunct to the north end of the house made place for this room, as an adjunct to the south end formed the magazine. Lack of drain pipes suggested that this closet was not flushed with water, though the house itself was well supplied with water as the drain pipes, one series running from the court through room H and another across the corridor, showed.

Possibly from this house, more probably from the series of rooms to the south where it was found, came the iron and bronze lock of a door. It consisted of an iron plate 0.065 m.  $\times$  0.09 m., upon which was superimposed a small square piece of bronze 0.05 m.  $\times$  0.05 m., in the center of which was the keyhole 0.02  $\times$  0.008 m.

Room E contained a great dolium almost complete and too heavy to move.

From the foundations excavated just north of the Roman temple and house, no sequence of rooms can as yet be determined. In them, however, two most interesting finds were made.

The first was a little altar, recalling in general shape the small tomb altars of Palmyra, whose top had the small round depression in the center for fire or sacrifice (Pl. XXXVI, 3). The central portion of each face has been cut back making a border above and below 0.04 m. high and leaving central portions 0.11 m.  $\times$  0.12 m. and 0.11 m.  $\times$  0.09 m. The centers of the four sides have received instead of the usual inscription representations of the sun. On one side there is a cross and an indication of the speeding rays between; on the opposite side simply three crossed lines. On the other two faces, those measuring 0.11 m.  $\times$  0.09 m., crossed lines form an X on one face, and the same symbol on the other with an additional half-line appears to be an incomplete repetition of the three crossed lines already noted on the altar. Traces of red show that originally the design had been enhanced with color, perhaps additional lines of red being added to the incised lines to make the designs more complete. We know the high position that the sun god held in the East, especially here at Dura. It seems most probable, therefore, that this little altar was the household shrine to the great god. An interest-

ing inference may perhaps be attached to its position not far from the little Roman temple. This temple erected by soldiers was presumably dedicated to the great god on behalf of the return of their emperor and themselves. We may be able to see, then, in the presence of this altar indication that the chief divinity was especially linked in Dura with the great sun god.

The second find was a small plate of heavy bronze set on four small knobs. A broad rim 0.027 m. wide surrounded the center which measured .075 m. in diameter and 0.018 m. in depth. Beneath this center four small knobs 0.01 m. high supported the vessel. A small slightly raised rim ran around the edge of the vessel; a second rather similar band around the inside of the brim. Apparently it served some special service in the ritual of the household, or comprised simply the show piece of dinner utensils. It is at present the only piece of this description found at Dura.

### 3. *The Baths.*

Most remarkable of finds in the Baths was the recovery of painted frescoes. Good sized portions of the countenances of three women, not to speak of smaller portions of at least six others, were dug up, the face of a little boy, the hand of a man and parts of dress (Pl. XXXIX, 3). Many of the fragments lay not more than a few inches below the surface yet the colors were excellently preserved. The heads were outlined in brown red, a color which was also used for the countenances of the male figures in contrast to the pale white of the female faces. In two cases no attempt except for the broad band of the outline was made to depict the hair and the nose was portrayed with one stroke of the brush. It was the eye which received most attention. Sometimes (in two cases) it was made with the three brown-red lines for upper and lower lids and the juncture of upper lid and brow. The eyebrow proper was painted in a single black line, the upper lid was shaded to give depth and bring out the contrast to the white of the eye, then the iris and pupil depicted by one color, their size giving a curious staring effect. Another portrait showed the hair parted in the middle, and depicted the individual lashes of the eyelids. Finally in this case shading is employed to lessen the field of the eye proper. This field the pupil almost fills enhancing the intense staring appearance of the countenance.

In addition to the figures appeared the representation of a large green wreath almost complete and as far as could be judged removed

from the figures of men. Other fragments of plaster showed a broad red band, close to one side of which ran a narrower band of black, and one piece showed a black band on either side of the red. It was possible to show from the shape of some fragments that the red band ran along the sides of room B (Pl. VI) and perhaps also along the edge of the ceiling. The piece with the narrow black band on both sides of the red suggests that lines of decoration ran down the center of the wall and divided it into panels.

In the paintings from the Temple of the Palmyrene Gods, the one of the Euphrates and the arms (Cumont, Pl. LIV), as well as the other representations on the north wall of the pronaos (Cumont, Pl. XLIX), has wide bands separating the different features; and around the picture of the Roman tribune sacrificing, runs a border of red and black, though here with a filling of yellow between the two. Panel bands do not separate the sacrificants in the scene of sacrifice to the five Palmyrene divinities (Cumont, Pl. LV), but wreaths suspended from above and appearing between their heads separate them both from each other and from the representations of the gods. From analogy with these pictures and from the fragments which remain may be constructed with some certainty the walls of this great room in the bath. The figures were standing, almost lifesize and must have covered the greater portion of the walls. In accordance with Parthian usage they face directly to the front and the individuals or groups were separated by panel bands of red and black or by wreaths of leaves painted between them. Around the edge of the room a final border of red with one narrow black band inside made as it were a frame for the whole picture. The whole makes a most interesting contribution to our knowledge of this Roman-Parthian art and an interesting secular contrast to the religious representations of the temple.

Of this room (B) the floor was paved with small bricks set in plaster, the walls were constructed of rubble and plaster. This rubble and plaster had given way to a large extent so that they stood in the south corner less than a meter high. In the opposite corner, however, the chamber adjoins the series of rooms comprising the bath proper, the walls of which were made of well baked bricks (0.375 m.  $\times$  0.27 m. and 0.32 m.  $\times$  0.33 m.  $\times$  0.04–0.05 m.) set in plaster 0.03 m.–0.045 m. thick surmounted by vaulted roofs of rubble. Here consequently the wall remained to a height of 1.75 m., though the plaster surface had fallen. As the plan (Pl. VI) shows, low benches of mud brick and plaster were built up around the walls.



The rooms A and D had been built with rubble walls, and around them was constructed a series of benches. Room D was tiled with the same type of small bricks as room B. In room C, however, one finds stronger walls of brick and above, the spring of the vaulted roof still in place. The floor was paved irregularly, partly with large tiles 0.61 m.  $\times$  0.59 m., partly with the smaller types of the other room, partly with no bricks at all. In one place a single drain pipe placed vertically below the floor allowed for drainage from the tiles. Two baths adorned the room, a small circular basin 0.65 m. deep, and a rectangular bath just over a meter deep furnished with three rounded steps in the corner. Around the bath three niches set in the wall had been adorned evidently with some works of art. No fragment of sculpture remained but a good-sized piece of *faïence* ware, the shoulder and part of the neck of one of the large ornamented *faïence* vases, found in the bottom of the rectangular pool suggests that perhaps graceful bluish-green vases of this type originally filled the niches above.

The adjoining room E with small shallow bath at the end had two peculiar features, an aperture or window above the bath opening into room R; and an alcove or closet formed by the wall beside the bath projecting toward the center of the room and cutting off the corner. The room was unheated except as far as the doorways into the calidarium and laconicum allowed heat to penetrate. Possibly also from room R the temperature and light of room E was further controlled. But the purpose of room R is doubtful. It is approached only from the rear of the building and may have served as the quarters of the bath-man. A right-angled water pipe, the only find of interest, furnished small clue as to its identity. In any case it is as probable that room E furnished moderate heat and light to the occupant of R as that room R controlled the lighting and heating of E. What was the purpose of the alcove beside the bath in room E is uncertain but I suspect that it was the toilet, and not a very sanitary one for there was no flushing system. A large number of water and drain pipes was found in the vicinity of the bath but none were of such size as to give evidence of a real sewerage system in the city.

The plan (Pl. VI) shows the arrangements for heating the series of three rooms, H, G, and F, through the hollow bricks in the walls. The system of hollow bricks was used apparently throughout, and several courses of bricks remaining in place (Pl. XL, 2) gave us both the size (some 0.355 m.  $\times$  0.232 m.  $\times$  0.215 m. with side apertures 0.095 m.  $\times$

0.13 m., others 0.375 m.  $\times$  0.245 m.  $\times$  0.115 m. with apertures 0.185 m.  $\times$  0.045 m.) and the method of laying. The floors of all three rooms were raised on small pillars of brick and mortar 0.30 m.—0.50 m. high. The furnace was located in room T and the heat and hot water went from there to the calidarium through a narrow arched passage ending in four arched openings, two straight ahead into the rectangular bath and beneath the floor of the calidarium (Pl. XL, 1), two to the right beneath the floor again and into the apsidal bath. Apparently from the size of the opening into the baths, the room as a whole was also heated directly through this entrance, but how the smoke and soot which marked the *soussol* pillars was eliminated was not apparent. Arched openings between the rooms beneath the floor allowed the heat to pass from one section to another.

The apsidal room F had been paved with great slabs of marble 1.75 m.  $\times$  0.75 m.  $\times$  0.035 m., fragments of which still remained, set in plaster; all three rooms had had vaulted roofs of plaster, and fragments of plain glass in F indicated that a top window had furnished the light.

Behind the apsidal room F lay a final room J, paved in part with small tiles, originally furnished with doorways to both B and E, but finally isolated by the blocking up of both. This was apparently the triclinium, for benches were built up along three sides of one section, and a quantity of small pieces of pottery was found in the east corner.

Not far from this room, a little northeast of the building less than a meter below the surface of the ground, apparently, therefore, above the floor level of the bath, three series of water pipes cross one another. One which we can follow runs along the east side of the bath following the street, the second moves at right angles to the first evidently running along the north side of the bath, apparently good indication that there were no more rooms on that side. Another line of pipes appears from beneath the walls of room B, the circular pipes running into a rectangular trough covered with loose tiles (like one of the drains in the Roman house) continuing the course of the system toward the wadi of the citadel. Still another system appears on the west side of the bath running along the line of pillars toward the north wadi at almost two meters below the surface. Apparently, therefore, this was the drain from the bath but time did not permit the further following of the network of water pipes during last season.

Many of the bricks from the bath were marked. One had a series of three circular stamps about the size of coins but with indistinguishable

designs, many had a single transverse or series of transverse lines. The same types were found among bricks from close to the Palmyrene Tower and Miss Gertrude Bell discovered bricks  $0.42 \text{ m.} \times 0.45 \text{ m.} \times 0.03 \text{ m.}$ , and  $0.21 \text{ m.} \times 0.21 \text{ m.} \times 0.03 \text{ m.}$  with the same designs at Buseirah at the mouth of the Khabour.<sup>1</sup> Possibly the marks are the signs of individual brick makers and their occurrence here and at Buseirah suggests a common factory.

An interesting but not surprising find from the Baths was a die of ivory  $9 \text{ mm.} \times 7 \text{ mm.} \times 8 \text{ mm.}$ , with the usual dots made of point and inscribed circle. Neither dice box nor other pieces, however, could be found. A most common find, however, from all parts of the excavations, especially from the tower of the citadel and towers of the circuit wall, were knuckle-bones for the game of chance still played today in Syria.

A very curious find was an oblong piece of plaster  $0.075 \text{ m.} \times 0.05 \text{ m.} \times 0.02 \text{ m.}$ , five of its six sides decorated with figures, all but one made with incised lines. The most elaborate is that of a horse very crudely drawn as running to the left. Above in the right hand corner is a swastika (Pl. XXXIX, 2). The swastika is repeated again on the opposite face with a curious figure which might be a very crude representation of a dog. One of the long side faces gives the representation of a branch and twigs, just a straight line down the center with herringbone lines on either side, and the opposite face has a somewhat similar figure except that in this case it ends with a triangle and emerges from a sort of stand. One of the smaller sides is blank, the other has the figure of a camel, this time in raised relief. This latter figure suggests the bullae of Hellenistic sites and may well have served as a seal; the other sides are more difficult to explain, perhaps the broad lines and crude designs could have served to stamp figures on bread and cake.

West of the Baths in the strata of ashes about the row of pillars half a plaster mold was found. It was made to mold the head and shoulders of a man  $0.08 \text{ m.} \times 0.12 \text{ m.}$ , the dress and details carried out in the Palmyrene style. Professor Eberhard of the Yale Art School very kindly made a cast, a representation of which is given in Pl. XXXIX, 1. The hair is very conventionally done, the locks represented by circular curls, in a style not uncommon at Palmyra (cf. Chabot, *Choix d'Inscriptions de Palmyre*, Pls. XXVII, 4; XXVIII, 8 and 11, etc.). The robe caught up over the right shoulder falls in rather stiff lines. The

<sup>1</sup> Gertrude Bell, *Amurath to Amurath*, p. 75.



mouth is not very gracefully done, but the molding of the face on the whole is quite good with excellent outline and carefully worked expression.

Ingholt's publication of dated busts seems to allocate the type with round curled hair to the second century A.D. and we may, therefore, tentatively assign our mold to this period.<sup>1</sup> [Editorial Note:—The closest analogy to the mold is found on a Palmyrene relief in the Museum of the University of Pennsylvania (see *The Museum Journal*, XVIII, 4, December, 1927, Plate to p. 337). It is a funerary relief with three figures; the hairdress of the figure on the left is the same as that seen on the cast of the mold found at Dura. The ornamentation along and across the drapery and on the trousers reminds us of the pearls on the dress of the Victory. Interesting too are the inlaid vases held in the hands of the other figures and the stamped decoration on the leather of the shoe of the reclining figure. The rosettes on the crescent-shaped curtain also occur on the stamped pottery and on a small shoe found at Dura (Pls. X, 1 and XLVII, 2). The hairdress of the youth on another Palmyrene relief in the same museum (see *The Museum Journal*, Plate to p. 339) is similar to that on our mold, but touched up to form curls. Here too we see the blocked-out decoration of the drapery around his neck—probably precious stones. The rosettes on the broad stripe down the front of his garment are similar to the rosettes on stamped pottery and the above-mentioned shoe from Dura.]

The long row of pillars from the Baths to the wall probably formed the place for promenade, but curiously the bases of the pillars are covered to a depth of almost two meters with ashes and cinders apparently taken from the Baths. The ashes reach close to the surface of the ground and must always have provided the pavement for the courtyard in the rear.

Digging on the east side of the Tower of the Archers (see Pl. VII) revealed a little side gate allowing access to the city from the north wadi, and brought to us an example of the crenellations of the city still intact (Pl. XXXV, 1). The graffito discovered by M. Cumont<sup>2</sup> had already represented to us the Main Gate surmounted by crenellations on top. Beside the Tower of the Archers, the higher wall of the tower had fortunately preserved this feature intact. They were made of rubble and

<sup>1</sup> H. Ingholt, *Studier over Palmyrensk Skulptur*, 1928, Pl. I, 2; III, 2; V, 2 and 3 dated 114–186.

<sup>2</sup> *Fouilles*, p. 13, Fig. 7.

plaster (which probably accounts for their disappearance elsewhere), some 0.65 m. thick at the base tapering up to a rounded top half a meter above the base. The width of the loopholes inside was 0.22 and 0.26 m., respectively, narrowing to 0.15 m. and 0.18 m. outside. The loophole adjacent to the tower faced directly to the front along the tower, the second looked out at a slight angle to the right to cover the flight of steps. The gate was evidently as old as the walls for the wall ran to the center of the tower then made a right turn to form a small vestibule or gate into the city proper. In later times the floor surface of this vestibule had been raised and the entrance remodeled. Cutting beneath the road bed paved with flat stones, one saw the blocks of the great wall half a meter beneath, a thin layer of charred ashes and a small well-worn block some 0.10 m. high revealing the old stepping stones leading to the vestibule. It was with the later work, the plaster remodeling of the gate on the higher level that the crenellations were connected and one suspects that it was only in this last period, the Roman epoch, that the crenellations were added. It might well be, however, that the remodeling simply recovered with a fresh coat of plaster crenellations already in place. The road from the little gate led gradually to the river along the side of the wadi, as house foundations showed. At the same time a stairway had been built in the later period of the gate running north from the later upper level of the gate directly down into the wadi. The steps were steep and narrow, each 0.23 m. high, 0.40 m. broad and 2.10 m. long.

#### 4. *The Temple of the Palmyrene Gods.*

M. Pillet has already described the general discoveries of the Temple of Palmyrene Gods and the architectural details of the tower (pp. 11 f.). As the plan shows (Pl. VII), the main entrance was found on the east side opposite the tower, the entrance within the court adorned with a series of four columns. M. Cumont suggested that room K had not been built until Roman times basing his conclusion on the painting and graffito.<sup>1</sup> Fragments of pottery found in the mud brick walls of K confirmed this conclusion. Unfortunately the walls of other rooms on the west and east sides were too much destroyed to give any evidence. It is just possible, however, that this whole series of rooms linked to room K were of this later date. It is interesting to note that the main entrance is not directly opposite the entrance of the naos and pronaos fronting the

<sup>1</sup> *Ibid.*, p. 126.

great central altar as we should expect but somewhat south of the central axis. Perhaps the original temple had been a considerably smaller building consisting of the group of rooms A-D or A-F, including the altar in the center. When at the time of the earthquake the importance of the tower was enhanced, a new series of rooms was built to include it in the temple proper and the entrance to the temple as a whole shifted to conform to the new conception. The entrance was erected midway between room H and the outer south wall of the temple. Apparently, therefore, the rooms on the south side, K, M, N, and O were built in a still later period and their erection destroyed the balance of the temple plan. Room K we know was built in the Roman period and probably the series of rooms linked to it on this south side of the temple. But the pottery from the outer wall of K, including many sherds of the ribbed ware, indicates that that also could not have been very much before the Roman period. Tentatively we might assign the group A-D perhaps including E and F to the first period, the rest of the rooms on the north and west to a second period when the tower was definitely included by the construction of the south outer wall and the position of the entrance made to correspond to this; and assign the group of rooms on the south to a still later period when room K was erected by Otes during the Roman occupation. It is noticeable that the south walls of rooms G and H do not conform to the line of the corresponding walls of E and F.

This might explain a very curious feature brought to light in the course of excavations, a great mud brick wall running in an arc from the west end of room F just behind the altar toward the entrance of the pronaos. The south end of the wall had been completely cut away so that it was not possible to tell exactly what it enclosed, but apparently it cut off direct entrance to the pronaos. Possibly in this later period it was erected to screen the original group of rooms from the larger group, or to cut off the great seat south of room E from the public eye. The altar as the central place of public sacrifice was left outside. If this theory is correct it suggests that the whole series of rooms A-F made one unit, probably the first series of the temple plan.

For the minor finds M. Pillet has already mentioned the two mills found in the two sections of the tower. Similar pieces were found in the towers of the Palmyrene Gate and apparently made up part of the regular soldier's equipment. They are made of basalt in the regular Roman pattern. Only the upper portions with the double cone shaped openings



and square apertures for turning sticks were found. In the homes evidently the more primitive methods of grinding grain were continued as finds of stone pestles, alabaster, and clay bowls showed.<sup>1</sup>

In the *débris* just west of the Palmyrene temple, some boots and shoes of leather were found. The largest, a caliga of a Roman soldier (Pl. X, 1) corresponds in shape to that pictured by Cagnat and Chapot,<sup>2</sup> but is made of solid heavy leather. Almost complete except for the sole it measures 0.29 m. long and 0.18 m. high. The front part of the boot was built up like a moccasin, a band of leather 0.07 m. high running around the toe from the back. On top laces were probably stretched across in sandal fashion, then the top was laced up through the series of four holes on either side.

Parts of a pair of child's boots were found, one boot complete (Pl. X, 2), the sole set with iron knobs, the top laced through a series of four crescent-shaped holes, two on either side. The sole was 0.17 m. long, the flat of the foot 0.07 m. wide, and the heel 0.045 m. wide. The shoe stood 0.085 m. high and was characterized by little flaps made of triangular pieces of leather 0.07 m. long spreading out from the front base of the top.

Finally the front part of a low shoe or sandal was found, the leather cut in rosette patterns as an ornament (Pl. X, 1). It must also have belonged to a child.

From the tower of the temple interesting pieces were part of a wax tablet 0.133 m.  $\times$  0.03 m. (broken) with a raised border on either side around the edge, 0.006 m. wide; parts of two combs of wood, one almost complete approximately 0.07 m.  $\times$  0.05 m. similar to the two-sided combs found in Hellenistic Egypt,<sup>3</sup> and similar again to the wooden combs with wide and narrow spaced bars sold in the bazaars of Deir-ez-Zor today; and a bracelet about 0.06 m. in diameter, made of links of silver, the rings 0.023 m. wide, the clasp fitted with a bell-like piece of silver (0.02 m.  $\times$  0.025 m.). (See Pl. XLVI, 2.) The Parthians were fond of ornaments as we know from picture and sculpture. We may see in this bracelet, therefore, rather the decoration of a soldier than the bauble of a girl.

<sup>1</sup> Cf. R. Cagnat and V. Chapot, *Manuel d'archéologie romaine*, II, 434, Figs. 632 and 633.

<sup>2</sup> *Ibid.*, p. 320, Fig. 530.

<sup>3</sup> Grenfell, Hunt and Hogarth, *Fayum and Their Papyri*, Pl. XV, 7 and 8.

*5. The Palmyrene Gate.*

Mr. Johnson has given me the following account of special building details in the towers of the Palmyrene Gate.

In the upper story of the south tower of the gate (Pl. III, F) enough of the original flooring was found to furnish a serviceable description of its construction.

The heavy north and south walls of the tower were diminished in thickness, leaving ledges (Pl. XII, 1), that to the north 0.70 m. wide, that to the south 0.86 m. wide. Across the span of 3.20 m. between these ledges were thrown beams (Pl. XII, 2) ranging from 0.12 m. to 0.19 m. in diameter and averaging 0.15 m. These beams are about 4.50 m. in length, falling 0.10 m. or 0.15 m. short of the total width, 4.76 m., of the tower above the ledges. These beams were anchored in place on the ledges by stones, used as wedges, and mud mortar. They are not set side by side, but at an average spacing of 0.25 m.

The sill of the door into the other room (Pl. II, G) is 0.45 m. above the level of the ledges; presumably the floor was even with this sill. Of this 0.45 m., 0.15 m. was taken up by the beams, and the remainder of 0.30 m., consisted of a thick matting of heavy rushes (Pl. XII, 3) laid directly on the crossbeams without intermediary small poles. When these had been beaten down firmly a mortar of clay must have been spread over this to make the flooring air-tight; but there is no evidence that this matting of reeds was packed solid with mud.

Such was the method used in the tower of the Palmyrene Gate; at the tower of the Palmyrene Gods, however, the holes for the crossbeams in the rubble partition wall are very small, 0.06 m. to 0.08 m., in diameter, weak by comparison and certainly not intended for heavy loads.

In the northwest tower of the citadel (Pl. XXXVIII, 2) may be seen traces of two floor levels, the first a row of large square holes for very heavy timbers, of which a few stumps were found, the second a line of shallow pits dug in the wall, here again for much lighter duty. In this tower was found a great quantity of rushes which must have constituted these floors.

The chief finds from these towers, the parchments, papyrus, painting, inscriptions, lamps, armor, and pottery are taken up under different headings. Here might be mentioned in addition the discovery of two laurel or olive crowns, made of three or four strands of wood trimmed into a circlet 0.18 m. in diameter. Even some of the foliage was pre-

served, the leaves still clinging about the branch. Both from this tower and from that of the Palmyrene Temple, handwrought iron nails in a remarkably fine state of preservation were recovered. One measured 0.28 m., was a centimeter square just below the head, and was capped by a round head 0.033 m. in diameter.

#### 6. Other Finds.

Mr. Johnson picked up on the surface of the site not far from the Palmyrene Gate two clay figurines of horses. The representation (0.10 m.  $\times$  0.055 m.) is very crudely modeled, the hair marked with incised lines, the eye depicted by a small circle and the legs tapering rapidly to a point. The figurines are of exceptional interest, however, for Fisher found one of the same type at Samaria<sup>1</sup> and several of the same type of modeling are among the finds from Nippur.<sup>2</sup> Apparently, therefore, it is a recognized type, probably the Parthian representation of their favorite mounts.<sup>3</sup>

Part of the figure of another animal, a sheep or ram, made in bronze was recovered from the dump just inside the city walls south of the Temple of Artemis. Unfortunately, however, its state of preservation does not allow us to do more than recognize the species of animal it represents.

A second bell, larger than the first, was recovered from the *débris* close to the Palmyrene Gate. It was made of bronze 0.07 m. high, 0.05 m. in diameter, was surmounted by a ring handle 0.02 m. high and possessed an iron tongue 0.01 m. in diameter extending to just below the lower end of the bell proper.

Finally we might mention the fragments of two playing boards, one found in the *débris* outside the walls of the citadel, the other near the Palmyrene Gate. Both were made of gypsum marked with rectangles, some of which were inscribed with transverse lines. They are of the usual type and fall into the large class of playing boards or computation tables which MacAlister says are found in almost every site in Palestine.<sup>4</sup>

<sup>1</sup> Samaria, Pl. 75, i.

<sup>2</sup> University of Pennsylvania Museum, Nos. 279, 261, and 255 in the book on Terra Cottas about to be published by Dr. Legrain.

<sup>3</sup> Other such figurines have been found at Petra: cf. Gustaf Dalman, *Neue Petra-Forschungen*, Leipzig, 1912, pp. 27 f. and Fig. 16.

<sup>4</sup> P. A. S. MacAlister, *A Century of Excavations in Palestine*, pp. 244-245.



7. *Armor.*

From the towers of the Palmyrene Gate as well as the tower of the Temple of the Palmyrene Gods came a good number of parts of arms and weapons. The great shield found in the previous campaign<sup>1</sup> had shown one of the types for infantry. This season many pieces of shields of a quite different type allowed us to reconstruct another kind with some accuracy. Apparently they were made of three pieces of light wood (about 0.01 m. thick) covered on both sides with leather. One of the side boards measured 0.80 m. on the outer edge, 1.03 m. in the center, and 0.15 m. wide, the ends rounding up to the top and bottom. Fragments of the center board, 0.16 m. wide, seemed to place the total width at about half a meter. Fragments from the edge showed the leather folded over to run beneath the shield in some places. Other fragments showed the leather covering of both sides linked with small bands of leather 0.02 m. or 0.03 m. wide running over the edge. The threads of wool which bound the junction were still in place. Fragments of leather showed that one of the shields was brilliantly adorned with bands of blue, yellow, and red, 0.03 m. to 0.05 m. wide, separated by narrow bands of black, the decoration diversified in one part with a checker-board pattern of bright yellow and red, the squares made about 0.01 m. square. It is this type of shield that the horsemen carried and that we see pictured in the little graffito published by Cumont.<sup>2</sup>

M. Cumont has already shown the type of arrows used by the bowmen<sup>3</sup> at Dura. Those found this season (Pl. IX) were of the same sort, remarkably thick, sometimes 0.035 m., unnotched for the string, the feathers two or three in number made of thin wood, the arrow tapering rapidly toward the point. None was found complete, but a number of iron heads found close to the shafts suggests that they were pointed with unbarbed heads of iron (Pl. IX). The heads were heavy,  $1\frac{3}{8}$  oz. to  $2\frac{3}{16}$  oz., sometimes made with shank to fit into the shaft of the arrow, sometimes with open back to allow the end of the shaft to be enclosed in and protected by the iron cover of the point.<sup>4</sup> It may be that these heads did not belong to the arrows, but were part of the light lances. On the other hand finds of these "heads" and shafts were com-

<sup>1</sup> *Rep.* I, pp. 16 f., Fig. 4. It has now been restored by Miss Mary Nettleton, see Pl. XXVI.

<sup>2</sup> *Fouilles*, p. 137.

<sup>3</sup> *Ibid.*, Pl. XCVII, 1 and 2.

<sup>4</sup> Dimensions of heads 0.115 m.  $\times$  0.01 m. and 0.09 m.  $\times$  0.015 m. (broken).

mon, while there were no shafts for lances found. The heaviness of the shaft demanded a heavy head, and the size and range of Parthian arrows were famous in the ancient world. We are surprised none the less to find that these heads are not barbed, for Plutarch remarks especially on the barbs of Parthian arrows as well as on their length and strength.<sup>1</sup> The broadness of the shaft probably accounts for the lack of notching; and desire for greater accuracy, the lack of feather on the fourth side. The weapon by which both Parthians and Palmyrenes won fame presents a most striking contrast to the Roman and Greek types, especially to all types of those of the American Indians.

Links of the common type of lorica squamata were common.<sup>2</sup> Generally they had four small holes in the upper right hand corner by which they were sewn to the coat of leather or cloth beneath; and two small holes on either side halfway down the piece by which they were linked to plates on either side. They ranged in size from 23 mm.  $\times$  15 mm., to 90 mm.  $\times$  54 mm., the smaller being all of bronze; those 60 mm.  $\times$  45 mm., and larger, all of iron. From the number found and the variety in sizes it may be inferred that different kinds and sizes were included in the same coat of mail, the large iron scales used for exposed, vulnerable parts, the smaller bronze plates employed where freedom of motion was more essential and danger of destruction less pronounced.

From the tower of the Temple of Palmyrene Gods came also a dagger case of leather (Pl. IX, a). The strip of hide had simply been doubled over, sewn along the side, strengthened with an extra band at the bottom to prevent the penetration of the point, and given a small extra strip on top to close the opening when the weapon was not carried. It was 0.17 m. long, the extended cover adding 0.03 m. more, and the top measured 0.03 m. across. From this point on top the case narrowed rapidly to allow the entrance of weapons only with long, sharp points.

A half ring of ivory broadening out to a point, and adorned with a design of circles was identified by Mr. C. O. Kienbusch of New York as an archer's thumb ring. The back part of the ring was unfortunately not recovered. The ring itself, half a centimeter wide, broadens out to a point one and a half centimeters long. This is hollowed out beneath to fit over the fleshy part of the thumb and adorned on top with five small inscribed circles. Enough of the ring itself remained to show the opening for the thumb to have been two and a half centimeters wide.

<sup>1</sup> Plutarch *Crassus* 25.

<sup>2</sup> Cf. Cagnat and Chapot, *Manuel*, II, 317.

Thanks to the excellent article of F. v. Luschan<sup>1</sup> and the book of E. Bulanda<sup>2</sup> the object and its use are well known. In the Mongolian method of shooting, the bowstring was pulled back by the thumb which was protected by a ring of metal or stone. The use of such rings is common throughout Asia according to F. v. Luschan<sup>1</sup> and their employment was general among Persians and Turks. According to Bulanda<sup>2</sup> these rings were used still earlier by Hittites and Trojans. Our own example is closely paralleled by the bronze ring from Syria pictured by F. v. Luschan and by the ornamented "Nephrit-Ring" of Virchow from Erbil (former Arbela).<sup>3</sup> Our example from Dura is certainly Parthian and it is possible that this race through their eastern connections were even more inclined to use the Mongolian method of shooting than the true Persians. Possibly the thumb ring itself is pictured attached to quivers in the paintings of arms (Cumont, Pl. LIV).

Minor finds of bronze and ivory did not differ from the types of smaller objects found everywhere in Hellenistic and Roman sites. It is always interesting, however, to see these small objects of personal use, and to discover even here on the Euphrates the articles of luxury imported from the western centers. Rings of bronze from 14 mm. to 27 mm. were not uncommon, nor were the long bronze toilet instruments 0.11-0.13 m. in length, sometimes plain, sometimes fitted with small scoops to extract kohl and rouge from narrow phials. A hollow wooden cylinder was also recovered, its dimensions 0.118 m.  $\times$  0.013 m., suggesting that perhaps its purpose was to hold the instruments just mentioned. Fibulae of the usual type, an ivory spoon, the bowl measuring 0.065 m.  $\times$  0.03 m.; styli of ivory and bone, fragments of bronze, ivory toilet articles and tableware complete the catalogue. Perhaps special mention should be given also to a belt buckle of bronze, evidently once the possession of a soldier.

#### *Note on the Great Shield.*

The great shield found in the excavations of 1928 (see *Rep.* I, pp. 16 ff., Fig. 4) is now correctly restored. It is made of round wooden rods 0.015 m. in diameter threaded through one great rawhide strip of leather (Pl. XXVI). One rod close to the right hand side measures 1.56 m., probably the total length of the shield at this point. The shield

<sup>1</sup> *Zeitschrift für Ethnologie*, XXIII, 1891, pp. 670 ff.

<sup>2</sup> *Bogen und Pfeil bei den Völkern des Altertums*, 1913, pp. 40 and 44.

<sup>3</sup> Virchow, *Zeitschrift für Ethnologie*, XXIII, 1891, pp. 81-82.



may have been pointed at the lower end to make it slightly longer in the center but it was more probably straight cut at the bottom as at the top. If so, the ends of the rods were covered by the end of the leather hide, which was folded over and caught on the reverse side by the thong threaded through. The photograph shows just this arrangement at the top, a piece of wood running horizontally beneath the outer covering of leather to prevent the bending of the shield. A similar arrangement at the bottom would be far simpler than to lap the piece of leather over a pointed end and run the cross piece of wood above the band. The strips of leather formed by the fitting through of the wooden rods are 0.07 m.—0.09 m. wide, five in number on one side, six on the other; and traces of leather beneath indicate that the whole shield was completed in the same way as the upper part. The shield measures 0.78 m. wide and probably had no more or very few more wooden pieces than the 54 which remain. At the sides, as the leather strip remaining in the upper left hand portion shows, the end of the hide was bent over and caught with a thong threaded vertically along the edge. There are no signs of decoration on the leather. With the shield was found a bar of wood slightly rounded, 0.40 m. long and 0.03 m. in diameter, notched close to either end, where pieces of fiber rope are caught loosely around it. This was apparently the hand clasp fitted to the inner right hand portion of the shield. This part of the shield had been destroyed by fire; and we can only surmise that the clasp was fastened to the shield by fitting the rope beneath the wood sticks. This would hold it securely as well as allow its position to be concealed by the leather covering.

This shield was not of the type used by the cavalry, for graffiti have shown us horsemen with shields much smaller in size. Fragments of this smaller, often oval, type were found both by M. Cumont (cf. *Fouilles*, pp. 262–263) and in our own excavations (described above). This larger shield was designed evidently as a protection against arrows, for it was not strong enough to stand against heavy infantry. It was probably used especially for defense in the city and perhaps for sallies against cavalry bowmen, for it would stop lighter missiles and at the same time it would not encumber the movements of a soldier so much as a shield of heavy metal.

#### 8. *Coins.*

BY SUSAN M. HOPKINS

No careful study of the coins found during the season of 1928–29 has

yet been possible, but a partial survey has given results of some interest. All of the 818 bronze coins found with a woman's jewels in a vase near the Palmyrene Gate date from the third century A.D. and include the following names; Macrinus, Diadumenian, Elagabalus, Gordian III, Philip the Elder, Philip the Younger, Otacilia Severa, wife of Philip, Decius, his two sons, Herennius Etruscus and Hostilian, and his wife, Herennia Etruscilla, Gallus, his son Volusian, Valerian, and Gallienus. Gordian, Decius, Herennia Etruscilla, Gallus, and Volusian are represented by both Latin and Greek coins, Valerian and Gallienus by Latin only, and all the others by Greek only. Practically all appear to be from the mint at Antioch. Other mints are, however, represented by a few coins found in various places on the site. One, from the Temple of the Palmyrene Gods, bears on the obverse a bust of Alexander Severus and on the reverse the veiled, turreted figure of the city-goddess seated, left, with ears of corn in her lap, an altar and some other object before her and the river god swimming at her feet. The inscription ΜΗΚΟΕΔΕΧΝ shows its place of origin as Edessa. Another, bearing on the obverse a radiate bust of Philip the Elder, left, shows on the reverse in a shrine with four twisted columns the figure of the city-goddess and the inscription ΙΟΥΣΕΠΚΟΛΩΝΕCΙΒΙΜΗΤ.<sup>1</sup> Most interesting, however, of the individual coins so far cleaned are two bronze coins of the Seleucid period from the redoubt. One has a fine laureate head of Zeus, right, and on the reverse a thunderbolt, a monogram, and the letters ΕΥΚΟΥ. The second, a coin of Antiochus III, has the bust of a woman veiled, right, on the obverse and on the reverse the head of an elephant facing left with a tripod behind and the inscription ΑΝΤΙΟΧΟΥ.

### 9. Glass.

BY CLARK HOPKINS

Kisa remarks that glass in Syria and Palestine is confined almost exclusively to the Roman period, only a few examples imported from Egypt being found in *débris* of previous centuries.<sup>2</sup> At Samaria one fragment of variegated glass was found in exclusively Israelite surroundings, fluted translucent glass in almost all strata of the post-Israelite *débris*, and blown glass usually in *débris* of the Roman pe-

<sup>1</sup> See Head, *Hist. Num.*, 2d ed., p. 815. The titles Julia and Septimia are in honor of Septimius Severus and of Philip the Elder.

<sup>2</sup> Kisa, *Das Glas im Altertume*, 1908, I, 97.

riod.<sup>1</sup> In tint the strict Syrian type is distinguished from types in the west by the warm white color, shading into light yellow or green and by the dull colorless and crystal shades as contrasted with the green-blue of the Egyptian and the strong green and olive of the Gallic and Rhine varieties.<sup>2</sup>

At Dura glass vessels, as we expect, seem to come in late in the history of the city, though their first appearance may well have been before the Romans actually entered. Two fragments of the variegated type were found, one of narrow yellow and purple bands in short zigzag waves on black, the second of small green and black combinations on a deep tomato red. One of the most common types at Dura, a type also very common at Samaria, was that of the open bowl decorated sometimes with incised lines, sometimes with ground lozenge-shaped or round depressions, sometimes with both.<sup>3</sup> The glass is sometimes light green covered with a white patina, sometimes a warm white without patina. Molded shapes are represented by a small phial 0.06 m. high with narrow neck and square body shaped with a molded depression on each side. A shape in blown glass listed by Kisa (Formentafel A, 13) as one of the commonest in Syria is represented by a good example in Dura, of pale blue-green glass. The base which forms the body rises in conical shape to a long narrow neck with rounded lip.<sup>4</sup> Of dark opaque glass was a small plain phial 45 mm. high, 18 mm. wide with flaring lip and of cloudy white glass, a curious tubular fragment bored in the center to make a phial of very limited capacity. The not uncommon type of long, slender phial with body in the center is represented at Dura by a well-preserved piece made of clear, translucent glass.<sup>5</sup>

Translucent window glass of a light-green tint was found at the Baths and in the court of the Roman house.

One vase handle with fine scroll design in milky white molded glass was found and part of the body of a vase of dark opaque glass with a raised design in relief. A curious fragment from the Baths was part of a large shallow bowl of black glass inset with melon-shaped patterns of pale green translucent glass around which ran narrow rings of white.

Among the beads were a few of clear glass, a few of the variegated type.

<sup>1</sup> *Harvard Excavations at Samaria*, I, 329.

<sup>2</sup> Kisa, *op. cit.*, 99.

<sup>3</sup> Cf. *Sammlung Niessen, Cöln*, Pl. XXVI, pp. 330-331.

<sup>4</sup> Cf. *Samaria*, Fig. 203, 7.

<sup>5</sup> Cf. Kisa, Formentafel A, 2 and *Sammlung Niessen, Cöln*, Pl. XLII, 767, 770.



10. *Jewelry.*

BY JOTHAM JOHNSON

Editorial Note:—We are publishing this description of the jewelry and the obvious parallels in order to make those who are interested acquainted with the material. The jewelry is now in the process of cleaning and it will be possible to determine the original shape of many of the pieces. We reserve the right to publish the results next year either in the Third Report of the Dura Excavations or elsewhere.

1. *The hoard near the Palmyrene Gate.*

During the excavations in the buildings on the main street of the city, just inside the Palmyrene Gate, was found a jar containing a hoard of 818 coins (cf. above, pp. 10 and 76) and the following jewelry:

1. Two bracelets, twisted; alternating beaded ("pseudo-granulate") and plain spirals of silver. 0.072 m. in diameter; strand 0.015 m. thick. Fitted with hinged clasps which were held by pins (now missing). (Pl. XLIV, 2.) To Syria.<sup>1</sup>

2. One bracelet, twisted silver; similar to the above, but with a gem on the clasp. Discussed below. (Pl. XLV, 1.) To Yale.

3. Two large silver earrings, formed of simple loops of silver wire. 0.052 m. in diameter; strand 0.004 m. thick. (Pl. XLVI, 1.) To Syria.

4. One earring, silver, with a pendent crescent. Discussed below. (Pl. XLV, 2.) To Yale.

5. Three earrings, silver; formed of silver wire coiled about a plain core. Discussed below. (Pl. XV, 1, 2, and 5.) To Yale.

6. One large earring, silver; alternating beaded and plain spirals similar to the bracelets in Nos. 1 and 2 above. 0.043 m. in diameter; strand 0.006 m. thick. (Pl. XV, 3.) To Yale.

7. One silver earring, broken; a simple loop of slender wire. 0.039 m. in diameter. (Pl. XV, 4.) To Yale.

8. One silver horseshoe pendant from an earring, with ring (broken), for attachment like that of the pendent crescent of No. 4. In its present warped condition it is impossible to state definitely; it may have originally been crescent shaped.<sup>2</sup> (Pl. XLV, 3.) To Yale.

9. One fibula, silver, set with semiprecious stones. Discussed below. (Pl. XLIV, 1.) To Yale.

<sup>1</sup> This refers to the distribution of the finds.

<sup>2</sup> Cf. Layard, *Babylon and Nineveh, Second Expedition*, p. 597, where are pictured

10. One leaf of thin sheet silver, crumpled. To Syria.

11. Two ball-shaped pendants, detached, of silver alloy. To Syria.

The bracelet illustrated in Pl. XLV, 1, is not perfectly round. It measures 0.065 m. in greatest, and 0.055 m. in least, diameter. The strand is 0.008 m. thick. Probably cast, the surface is molded to represent twisted strands of alternate beaded and plain wires. This technique knows no limitations of time or place in ancient jewelry; it is found on a bracelet in the Cyprus Museum (of which a new catalogue is said to be in preparation), assigned to the end of the fifth century B.C. Other examples, of the late Hellenistic period, are in the Palestine Museum; but in the sculptured busts from Palmyra are parallels most frequently met: cf. Ingholt, *Studier over Palmyrensk Skulptur*, Pls. XIII, 3; XV, 1 and 3; Chabot, *Choix d'Inscriptions de Palmyre*, Pls. XXIX, 1 and 14; XXX, 1 and 4; XXXII, 2 and 5, etc. The dated examples quoted by Ingholt range from the middle of the second century to the middle of the third, A.D. Another closely dated example is found at Dura itself, on the figure of Bithnanaia in the great frescoes of the Temple of the Palmyrene Gods; Cumont, *Fouilles*, Pl. XXXVI; cf. below, p. 166, where Cumont's approximate dating of 75 A.D. for these frescoes is confirmed. The plaster statuette of Artemis discovered at Dura by Cumont (*Fouilles*, Plate LXXXIII) seems to be wearing a similar bracelet.

The clasp of this bracelet is in the shape of a knot, a *motif* very common on Hellenistic jewelry; cf. examples illustrated in *Jewelry*, by Christine Alexander, in *Publications of the Metropolitan Museum of Art*, Figs. 23, 26, 27, and 28; and in the *British Museum Catalogue of Jewellery*, Nos. 1607, 1608, 1609. In the present bracelet the center of the knot holds a setting for an engraved carnelian, 0.012 m. in diameter, bearing an intaglio character apparently gnostic in significance. The design is crudely cut; the intended character is not clear. The hinged clasp is fairly common for bracelets; cf. a gold bracelet from Vetulonia now in the Museo Archeologico in Florence, well illustrated in Hans Mohlenstein, *Die Kunst der Etrusker*, Fig. 84. At Taxila in India were found earrings with a very similar hinged clasp; cf. the report by Sir John Marshall in the *Archaeological Survey of India*, 1912-13, Pl. XXIIb, Nos. 1 and 2 (also cited in his *Guide to Taxila*). In the

molds for earrings found at Kouyunjik and Nimrud, and pronounced "Assyrian" by Layard. Among the molds are two for earrings with pendent crescents, like that of No. 4, and one for an earring which ends in a pair of horns strongly suggestive of the broken pendant in Pl. XLV, 3.

*B. M. Cat. of Jewellery* cf. Nos. 2787, 2812–2815, and 2876, which have hinged clasps bearing gems in the manner of the present object under discussion; cf. also No. 2818, *ibid.*

The earring illustrated in Pl. XLV, 2, probably owes its origin to Palmyra, though the earrings on the Palmyrene busts are indifferently reproduced in their various publications. The bust pictured in Ingholt, *op. cit.*, Pl. XVI, 2, has similar earrings. At Palmyra the device of catching a stone between the horns of a crescent as a necklace pendant is familiar; cf. Ingholt, *op. cit.*, Pl. XVI, 1; Chabot, *op. cit.*, Pl. XXIX, 14, etc. For examples from other sites cf. *B. M. Cat. of Jewellery*, 2719, 2720, 2738; P. Buberl, *Die griechisch-ägyptischen Mumienbildnisse der Sammlung Th. Graf* (1922), Nos. 14, 22, 48, and 49 (jewelry depicted on mummy portraits); crescent pendants on earrings appear in a number of interesting specimens in *B. M. Cat. of Jewellery*, Pl. LXVIII. The present earring is a decadent form of the same *motif*, the place of the stone being taken by two small beads raised from the metal at the meeting of the horns.<sup>1</sup>

This earring is 0.035 m. in diameter. The crescent is 0.02 m. long, including the loop on which it is hung. The method of attaching this earring and the pair illustrated in Pl. XLVI, 1, is unusual; but it is found on a Mycenaean gold earring from Cyprus, No. 273 in *B. M. Cat. of Jewellery*, on a pair of Roman earrings, *ibid.*, Nos. 2828–2829, and a bracelet, No. 2809. One end of the wire was twisted into a permanent

<sup>1</sup> Editorial Note: Further examples of such pendants on necklaces occur frequently on the busts found at Palmyra. See J. B. Chabot, *Choix d'Inscriptions de Palmyre*, Pl. XXIX, 2. On Pl. XXX, 4, it occurs as a pendant on the fourth necklace. There are also necklaces of this type in the museum of the University of Pennsylvania, *The Museum Journal*, Dec. 1927, No. 1 to p. 326; this lady has three pendants of our type on three of her four necklaces. She also wears the twisted bracelet like that found at Dura; No. 2 to p. 328 is the bust of a lady with only one pendant hanging from a chain necklace.

The gorgeous display of jewelry on the Palmyrene busts is a fashion which also prevailed in Dura and in India. As early as 316 B.C. Indian wives dying with their husbands gave away their jewels before ascending the pyre, as told by Diodoros, 19, 34, 4: ὁ δὲ κόσμος ἦν περὶ μὲν τὰς χεῖρας δακτυλίων [τε] πλῆθος ἐνδεδεμένων λίθοις πολυτελέσι καὶ διηλλαγμένοις τοῖς χρώμασι, περὶ δὲ τὴν κεφαλὴν χρυσῶν ἀστερίσκων οὐκ ὀλίγος ἀριθμὸς παντοδαποῖς λίθοις διειλημμένων, περὶ δὲ τὸν τράχηλον ὄρων πλῆθος, τῶν μὲν ἐλασσόνων, τῶν δ' ἐκ τοῦ κατ' ὀλίγον αἰεὶ καθ' ὑπέρθεσιν μειζόνων. A better description of the Palmyrene necklaces would be hard to find.

There was a flourishing business of jewelry at Palmyra; Cumont, *Fouilles*, p. 65, refers to the well-known inscription, *Inscr. Gr. Rom. III*, 1031, mentioning a Palmyrene guild of jewelers.



coil; the other end could be untwisted from its position, straightened and withdrawn from the coil. When in place in the ear, it could be passed through the coil again and retwisted about the other end. This is clearly shown in the photograph, one end being loosely twisted in place.

In Pl. XV, earrings 1 and 2 are a pair, and earring 5 is very similar. They are 0.04 m. in diameter. About a core of heavy silver wire has been coiled finer silver wire over half the circumference. This is also a common technique; closely similar earrings were found by Marshall at Taxila; cf. *Arch. Sur. India*, 1912-1913, Pl. XXIIa, 3, 4, and 5. The method of attachment of these and of the other earrings of Pl. XV was the standard classical loop, through which the free end was passed and caught.

The most interesting and characteristic piece, one which can be dated within fairly close limits, is the fibula illustrated in Pl. XLIV, 1. It is trapezoidal in shape, 0.09 m. long and 0.052 m. wide at the bottom. The surface is patterned off, by fine twisted wires which suggest braided threads, into six compartments. Each of the top pair of these compartments has one small, flat garnet, firmly fixed in a simple setting. The other compartments have two garnets each. The upper end of the fibula is circular in shape, and in this is a small, polished white stone. The surface is further broken with small beads, and the entire circumference is set off with regularly spaced beads, of which a number are now missing. Small circlets replace the beads along the wider end. The back of the brooch is undecorated, but at one end appears a remnant of the catch; between small eyelets fixed to the body of the fibula is caught a small horizontal wire, from which dangles a broken length of the pin proper. There was no spring, and only a trace of the attachment appears at the other end; the point could not be expected to hold if caught under a simple hook as in spring fibulae, but the method of fastening remains obscure. The silver body is very thin, but rigid. The fibula is broken into three pieces.

The presence of this jewel definitely allies the Dura art in precious metals with that of Palmyra. In the *American Journal of Archaeology*, 1923, p. 69, appears a *résumé* of a paper read before the meetings of the Institute by Harald Ingholt on the dating of Palmyrene busts; he bases a large part of his argument on the early appearance of this trapezoidal shape of fibula and its disappearance toward the end of the second century A.D. He has developed this subject more fully in his published study, *Studier over Palmyrensk Skulptur* (cf. pp. 54, 70 f., 80, 82).

This shape he finds only at Palmyra,<sup>1</sup> and only in sculptural representation; the period of popularity of the shape runs from about 120 A.D. to about 180 A.D. Three dated fibulae of this shape are clearly shown in Ingholt, *op. cit.*, Pl. XIII, 1, 2, and 4; others may be seen in Chabot, *op. cit.*, Pl. XXX, 14; *Arch. Anz.*, 1910, col. 475, Fig. 3 (Munich). In the reproductions available for study no parallel designs of surface decoration are found. After 180 A.D. the fibulae turn speedily to the round form which is standard through the remaining history of Palmyrene portraiture. Is this evidence that the jewelry of the present hoard dates from the middle of the second century A.D., although the coins with which it was found range from the second to the sixth decade of the third century?

## 2. *Miscellaneous finds of jewelry.*

Pl. XLVI, 2 and 3, show a silver bracelet, 0.065 m. in diameter formed of an endless silver wire twisted back upon itself in a chain pattern. The open ends were soldered together to close the circle, and this joint was concealed beneath the cone-shaped silver button shown in Pl. XLVI, 3.

Pl. XLV, 5, shows a silver earring in all respects like one found in the hoard, Pl. XV, 3. Its diameter is 0.043 m. The provenance of this piece was the building on the citadel, and it is thus possible that it dates from slightly before the beginning of the Christian era.

In Pl. XLV, 4, is shown a miscellany of jewelry from various parts of the city: three rings of bronze, 0.02 m. in diameter, a bronze ring, 0.016 m. in diameter, and a large, heavy ring of bronze, 0.028 m. in diameter. The smallest of these would fit only on a child's finger; and it must be noticed that many of the Palmyrene busts show rings worn on the second instead of the last joint of the little finger.

The simple bronze bracelet in Pl. XLV, 4, is 0.06 m. in diameter, and its strand is 0.007 m. thick. The two broken bracelets have serpent heads at the preserved ends, similar to a bracelet illustrated in Christine Alexander, *Jewelry*, Fig. 80. The larger of these also came from the building on the citadel, and so may date from a comparatively early period in the occupation of the city.

All of the pieces discussed in this group were allotted to the Yale Museum in the distribution of the finds.

<sup>1</sup> Rostovtzeff (*Mon. Piot*, XXVI, pp. 156-157; *Social and Economic History of the Roman Empire*, p. 512, n. 15) has expressed the opinion that the Palmyrene jewelry art was derived from the Parthian-Sarmatian.

## IV. INSCRIPTIONS

BY CLARK HOPKINS

1. *Roman Temple.*

H. 1. Fig. 1. Altar from little Roman temple; base 0.65 m. long, 0.30 m. high by 0.47 m. Face with inscription 0.465 m. by 0.46 m. and 0.34 m. high at the two ends respectively by 0.40 m. Letters 35 mm. high cut in the stone and colored red.

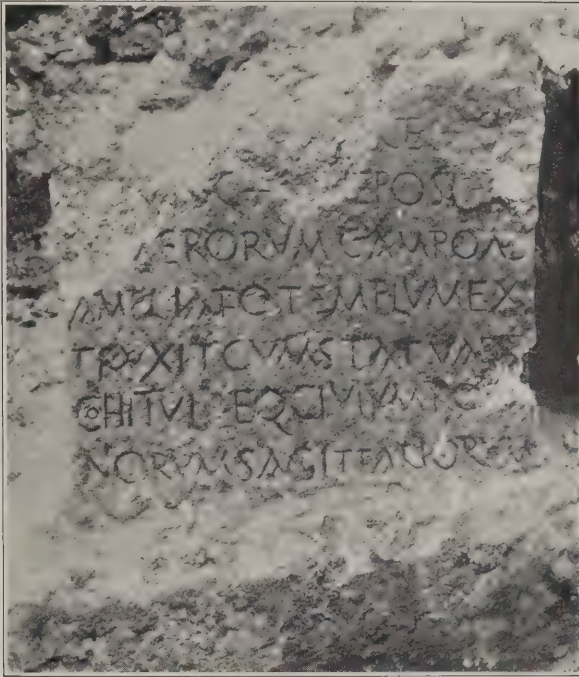


Fig. 1.

Altar from Roman Temple

Ces

(centurio) leg(ionis) II]II Scyt(hicae) [prae]positus  
 [nu]merorum campo ad-  
 ampliato templum ex-  
 truxit cum statua pe[r]  
 coh(ortem) II Ulp(iam) eq(uitatam) civium Roma-  
 norum sagittariorum



An inscription found in the excavations of 1928<sup>1</sup> and bearing the letters LEG IIII SCY allows us to restore with comparative certainty the second line. On this new stone the "SC" of the second line is clear, followed by a peculiar letter of which only the lower half shaped like a cross is visible. Preceding the "SC" the lower parts of two upright lines are discernible. The *praepositus* was commonly the leader in charge of separate detachments, *vexillationes*.<sup>2</sup> Mr. Little has called my attention to parallel references in which the centurion of a legion is mentioned as in charge of *numeri*. Two such records come from the inscriptions of the *numeri Palmyrenorum* stationed at El-Kantara in Africa, one mentioning *Q(uintus) Vettius Iustus (centurio) leg(ionis) III Augustae praepo(situs) n(umerorum) Palmyrenorum*,<sup>3</sup> the second naming *M(arcus) Annius Valens (centurio) leg(ionis) III Augustae praepositus n(umerorum) Palmyrenorum*.<sup>4</sup> The restoration, therefore, of the common abbreviation for centurion before *legionis* in the second line seems well justified. Immediately preceding we expect the name of the officer, remains of which we have probably in "Ces." As Professor Rostovtzeff remarks,<sup>5</sup> the fourth Scythian legion formed a part of the Syrian army from about 56/7 A.D. to the fifth century and was stationed probably in North Syria not far from Antioch.

The top lines of the inscription were lost. They were, however, probably a dedication to some god for the salutation or safe return of the emperor. An interesting dedication to Jupiter from upper Germany reads *J(ovi) o(ptimo) m(aximo). Pro salut(e) dominor(um) imp(eratorum), M(arcus) Octavius Severus (centurio) leg(ionis) VIII Augustae praeposit(us) Brittonum et expl(oratum)*;<sup>6</sup> but to what god our own temple is dedicated and with what formulae the emperor is greeted must remain mere conjecture.

L. 3-4. *Campo adampliato*. The not uncommon term *adampliato* carries usually the meaning "enlarged," though often the erection or restoration of ornamental features is associated with it.<sup>7</sup> Apparently the temple stood on part of the campus, for the phrase suggests that the

<sup>1</sup> *Rep.* I, pp. 49 ff.

<sup>2</sup> A. von Domaszewski, "Die Rangordnung des römischen Heeres," *Bonner Jahrbücher* 117, 1908, p. 108; H. M. D. Parker, *The Roman Legions*, 1928, p. 164; Cheesman, *Auxilia of the Roman Army*, p. 93.

<sup>3</sup> *C.I.L.*, VIII, 18008.

<sup>4</sup> *Ibid.*, 18007.

<sup>5</sup> *Rep.* I, pp. 49 ff.

<sup>6</sup> *C.I.L.*, XIII, 6526.

<sup>7</sup> H. Dessau, *Inscriptiones Latinae Selectae*, 1916, 9221, 4290, 2161, etc.

addition gave cause and opportunity for the new building. As M. Pillet remarks (p. 17), this campus must have been along the great wall of the citadel and the slope rising to the plateau a few rods to the southwest. The temple stands only a few meters from the great wall of the citadel, the back wall of the temple jutting into the little street which approaches the northwest entrance to the citadel. Excavations to the north revealed a labyrinth of walls stretching to the slope which rises to the higher city level to the northwest. Apparently, then, the only open space was to the southeast across which space the temple faced. Such a place would be particularly appropriate for the campus, because across the southeast end ran the main street of the city down the wadi to the river. Here must have been located the second great city gate. Apparently in connection with this campus and the river gate was constructed the building of baked Roman bricks, constructed below and north of the redoubt opposite the far end of the citadel. But future excavations must determine the relationship of the various factors.

L. 5. The suggestion of M. Cagnat of *per* for the restoration of the end of this line seems most satisfactory.

L. 6-7. *Coh(ortem) II Ulp(am) eq(uitatam) civium Romanorum sagittariorum*. An altar honoring the emperor, Commodus, from the 1928 discoveries at the main gate mentions the second Ulpian mounted cohort *Commodiana*.<sup>1</sup> It is by no means impossible that it is this same cohort which is mentioned on our altar. Inscriptions from Intercisa in lower Pannonia give us interesting parallels in the change of title for a cohort recruited in Syria. One text gives us the name complete, *Cohors I Miliaria Hemesenorum Sagittariorum equitata*.<sup>2</sup> At the close of the second century A.D. it receives the title *Cohors - - - c(ivium) R(omanorum)*. It bears the name *Antoniniana* for several years under Septimius Severus and Caracalla, later bears the title *Maximiana*, then *Gordiana*. In 240 A.D. we find it still bearing its title of *c(ivium) R(omanorum)*.<sup>3</sup> But in an inscription dated 214 A.D. we have the cohort designated simply *coh(ortis) miliariae Hem(escnorum) Anton(inianae)*.<sup>4</sup> Certainly here it is taken for granted that the renown of the cohort and its honor-

<sup>1</sup> *Rep.* I, p. 54. Professor Rostovtzeff's surmise of P(aphlagonum) will probably have to be given up in spite of the peculiar form of the "E" suggesting a double letter.

<sup>2</sup> *C.I.L.*, III, 3331.

<sup>3</sup> G. Cantacuzène, "Le recrutement de quelques cohortes syriennes," *Le Musée Belge*, XXXI, 1927, p. 164.

<sup>4</sup> *L'Année Epigraphique*, 1910, p. 133.

any title makes unnecessary the further term *civium Romanorum* and the more careful designation *sagittariorum*. On our altar we have a *cohors II Ulpia equitata*, called *civium Romanorum sagittariorum*; on the altar from the Main Gate we have a similar *cohors II Ulpia equitata* with the single title *Commodiana*. But the inscriptions from Pannonia teach us that the title *sagittariorum* is sometimes omitted and that the honorary title made from an emperor's name is sufficient without the words *civium Romanorum*. At Dura one altar is erected to Commodus, the other is part of a temple, the splendid molding of whose frieze (Pl. XXXVI, 1) allocates its erection to the early Roman period. If the inscriptions designate different cohorts, therefore, they must both have been located in Dura in the last half of the second century. It seems more reasonable to believe that both inscriptions refer to the same cohort, which, honored by Commodus, erected the altar of the Main Gate to him and which probably before this time had erected the temple near the citadel.

## 2. Temple of the Palmyrene Gods.

H. 2. Stone slab  $.31 \times .35 \times .095$ . Letters 25 mm.

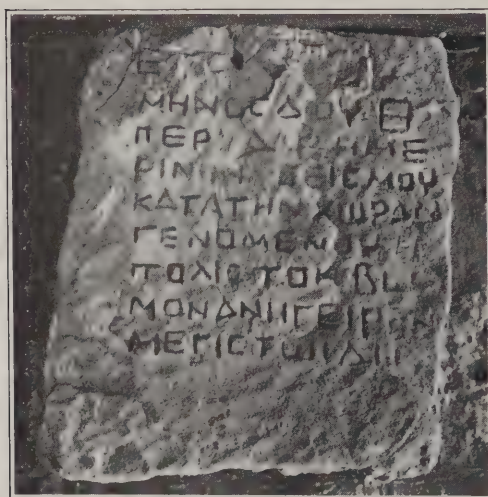


Fig. 2.

Earthquake Inscription

ἔτους βου'  
 μηνὸς Δίου  
 περὶ δ' ὥραν ἡμε  
 ρινὴν σεισμοῦ  
 κατὰ τὴν χώραν  
 γενομένου ἢ  
 πόλις τὸν βω  
 μὸν ἀνήγειρεν  
 μεγίστῳ Δίῳ

160 A.D.

The ninth day of the month of Dios about the fourth hour of the day, when the earthquake occurred throughout the region the city set up this altar to the greatest Zeus.

The letters of the date are obscured but still quite traceable on the stone. Professor Rostovtzeff pointed out to me the outline of rho clearly



visible in combination with the omega and its common use as symbol for  $\omega\rho\alpha$ . Thanks to Mr. Johnson's work on the calendar we can reach the exact date of October 26/7, 160 A.D., about 10 o'clock in the morning.

L. 4. σεισμοῦ. Dr. Diener<sup>1</sup> in an interesting article divides Syria and Palestine into two earthquake zones, one reaching from the upper courses of the Tigris across to Aleppo and Antioch then along the coast to Ascalon and Gaza, the other stretching from Aleppo south through central Syria and the Jordan valley. His list of quakes does not, however, include our date nor is there any record of a quake at this time in other Syrian cities as far as I know. Apparently Palmyra was not greatly affected for there is no great building period at this time, as the dissertation of S. Butler Murray shows.<sup>2</sup>

One recalls the votive inscription of Byblos of escape from an earthquake.<sup>3</sup>

L. 6-7. ἡ πόλις. One would be much interested to know to just what bodies this refers, certainly it suggests a δῆμος and a βούλη, similar to those at Seleucia and Palmyra.

L. 9. μεγίστῳ Δί; from the north wall of the pronaos come two graffiti to greatest Zeus scratched near the person to the right in the scene of the Roman tribune sacrificing.<sup>4</sup> As Cumont remarks the title is well known in Syria and especially at Palmyra.

This stone was discovered within the tower of the Temple of the Palmyrene Gods, just behind the large cement plaque to which it was probably attached (Pl. XXXIV, 2). The plaque was erected at the end of the central wall facing the door and was evidently an altar of importance. Its late date is established by its position at the end of a wall built after the extension of the tower, for there is no interlocking between the back and center walls. The type of construction for this additional wall, rubble and plaster, also suggests a later date.

The greatest interest attaches to this inscription because of its position within the tower rather than in the court of the temple or close beside the naos and pronaos where one would expect the most important altars to be erected. It may be that wishing to erect one of considerable size, the small rooms of the naos and pronaos were found inadequate;

<sup>1</sup> Dr. Carl Diener, *Der Libanon*, 1886, p. 260.

<sup>2</sup> *Hellenistic Architecture in Syria*, 1917.

<sup>3</sup> Dussaud, *Revue Archéologique* I, 1896, p. 299.

<sup>4</sup> Cumont, *Fouilles*, pp. 387-388.

and seeking a covered enclosure, the tower itself was chosen. There seems, however, good reason to believe that a more powerful influence had dictated the position of this new offering.

Excavations this season revealed the fact that in making this tower, the builders had inclosed within the fortifications an older building; a small square structure 5.80 m. on a side. The different method of construction used had disclosed the antiquity of this more ancient building; the number of inscriptions scratched upon its walls testified to its importance. In general these inscriptions recalled merely the names of citizens but twice the petitions are coupled with the name of Zeus; a striking coincidence in view of this greater inscription dedicated to the supreme god. We know that most of the inscriptions were written before the city walls were built, for the formulae differ strikingly from those of the Main Gate. We are surprised to find a building so carefully built, standing before the great walls were completed, so far from the citadel and the center of the community. It might have been only a guard-tower built strongly outside the main fortifications, for we find such a type of tower at Hatra. The inscriptions on the walls, however, suggest a sanctuary, or a combination of watch tower and sanctuary.

Just northwest of this tower in the midst of the desert lies the ruins of a monument which M. Pillet considers a triumphal arch. It is past this that the modern road runs to Deir-ez-Zor and it is quite probable that the older road followed the same route along the edge of the plateau. Before the great walls were built, therefore, with their entrance facing west toward Palmyra, one expects the route to have followed the modern track close beside the Temple of Palmyrene Gods to the citadel. In this case a watch tower or outpost to guard the route would have been of great service and this may have been the sole cause for the erection of this extraordinarily well-built structure.

On the other hand in the precinct of the Palmyrene Temple we are dealing with sacred ground. What amazes us most when we consider this temple is its most curious location tucked away far in the angle of the city wall. M. Cumont believes its location is due to Palmyrene soldiers; but there is as yet no indication of a soldiers' field or barracks in the vicinity and it seems a most unusual place for soldiers to be congregated. The Romans later chose the Main Gate and the region of the citadel as their headquarters and it is to these same places that we should look for the centers of former forces. Furthermore, if the walls needed special protection at this point, it seems most curious that the tem-

ple precinct should include the whole angle as well as the principal tower.

On the other hand if we assume for a moment that the older structure encased in the later walls had marked an ancient sanctuary, we have at once good reason for the location of the later precinct in the same spot. This would explain why the naos and pronaos, the chief rooms of the new temple, rested on the tower itself, and perhaps why the great circuit of the wall was extended to include this angle. The fortifications followed in general the edge of the wadis to make full use of natural advantages of the terrain. From the end of the wadi close to the Palmyrene temple, however, to the end of the valley at the other end of the site, a great stretch of wall almost a mile long runs over the level desert. If the temple had been omitted and the wall had run from just back of the Baths, no appreciable length would have been added to this stretch of wall, and the consequent decrease in the size of the city would have affected only blocks apparently very little used for building. Furthermore, extension to include the temple makes a considerable stretch of additional wall. It would seem plausible, therefore, that there was some other motive in throwing out this extension other than the doubtful advantage of following further the slope of the ground. If we consider that there was a sanctuary already located in the northernmost corner of the site, an adequate explanation of this plan is obtained.

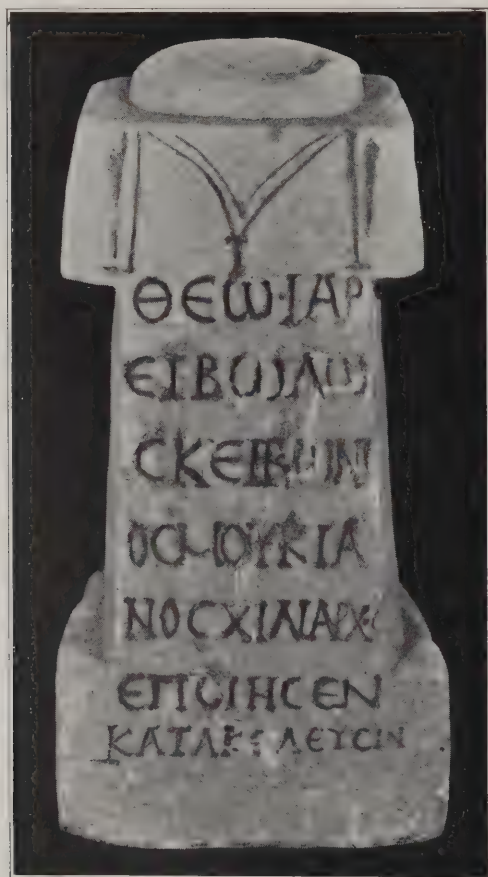
It would be for this reason then that the inscription and altar at the time of the earthquake were installed in the tower. The position of the older sanctuary on the edge of the wadi had necessitated its inclusion in the fortifications when they were extended to cover its precinct. To compensate for this, a larger temple was erected beside it; its sanctuary resting on the walls of the older building itself. When, however, the city was in dire straits; when their homes were literally collapsing about their ears; then the inhabitants turned to the most ancient and sacred habitation of the god and erected their new altar and their supreme petition within the walls of the old stone building which had once alone marked the precinct of the god.

It was perhaps this reawakening of recognition that determined the location of the Roman sanctuary (Pl. VII, room K), on the west side of the tower. M. Cumont judged from the paintings that it had been built in Roman times, and ceramic evidence bears out this judgment for in the mud brick which made its walls, fragments of Roman pottery were found. This interpretation of the oldest structure in the precinct



will perhaps explain the curious and most ancient representations of dancing figures chipped on the walls, figures apparently engaged in a ritual dance.

H. 3. Gypsum stone 0.733 m. high. Cut from one block. The base is 0.37 m.  $\times$  0.37 m.  $\times$  1.65 m. The face 0.38 m.  $\times$  0.26 m.  $\times$  0.223 m. The top 0.32 m. and 0.29 m.  $\times$  0.22 m.  $\times$  0.14 m. Bowl on top 0.20 m. diameter  $\times$  0.028 m. deep with border 0.02 m. Letters 0.045 m. high.



θέω 'Ιαρ  
ειβώλω  
Σκρειβώνι  
ος Μουκία  
νός χιλίαρχος  
ἐποίησεν  
κατὰ κέλευσιν

Fig. 3.

Altar to Iarhibol

The letters are in general cut in the stone and marked with red. The rho of Skreibonios, however, is marked in afterward just with paint,

introduced between the kappa and the epsilon, and the last line is entirely uncut, marked only with the paint as if the engraver became tired of his work. The ending of *chiliarchos* also is crowded into its place, made very small and designed only with the paint. The bowl on top is entirely unmarked with fire showing that it was used for libations only. Most interesting it is to see the design painted on the upper part of the block for it reproduces exactly the design cut in altars from Assur of a type which Andrae found also (in fire-altars) at Hatra.<sup>1</sup> An altar of the Roman period with somewhat similar decorations Fisher found at Samaria.<sup>2</sup>

The altar stood just beside the entrance to the tower of the Palmyrene Temple immediately beside an uninscribed altar. Just above was a little niche and its rayed border connects it at once with the altars below and the god Iarhibol, deity of the sun. Scratched on the walls inside of the temple was the representation of a deity holding a lion in either hand. From his head (Pl. XLI, 1) project the rays of the sun. We know that Iarhibol was one of the trinity of divinities to whom the Palmyrene Temple was dedicated. It is tempting to connect this altar with the earthquake inscription found inside the tower and to see here again indication that the older building of the tower and so the tower itself had a special sanctity attached to its walls.

L. 3-4. Σκρειβώνιος Μουκιανός,—common Roman names though not otherwise known at Dura.

H. 4. Gypsum stone in four pieces 0.40 m. × 0.41 m. × 0.09 m. The lower right hand corner is missing for a space 0.11 m. × 0.15 m. in size.

Even at the top the gypsum stone of which it is composed is much worn. In view of the fact that it was found only a few inches from the surface of the ground (Temple of Palmyrene Gods close to room J within the central court) it is remarkable that the letters have remained at all. The transcription of the first eight lines is pretty certain; the only doubt being in the name Ammonios where the stone is broken and the letters most difficult to read (it may possibly be Antiochos) and in the restoration of ὑπέρ chiefly because the name following is succeeded by τοῦ Ἀυσίου as if this were the name of the grandfather rather than the father. Apparently, however, the stonecutter introduced the τοῦ by mistake for the following name Seleukos has the regular τοῦ before it and the genealogy is not usually given beyond the third generation.

<sup>1</sup> Andrae, *Hatra*, p. 154.

<sup>2</sup> Fisher, *Samaria*, Pl. 59, d.

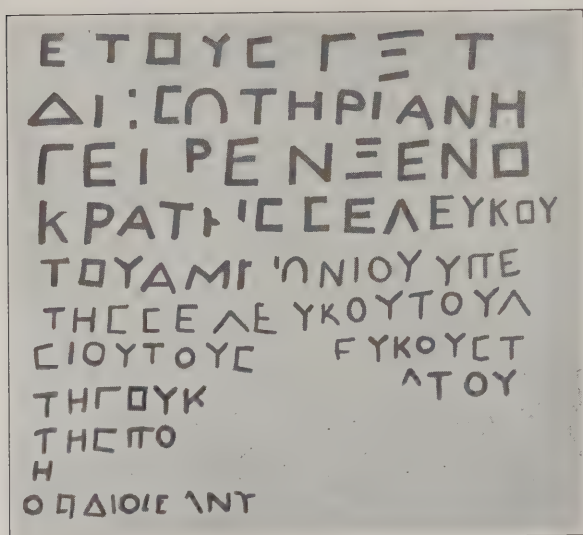


Fig. 4.

Facsimile of dedication to Zeus Soter

L. 1. ἔτους γξτ'. The numerals though difficult to read are certain and give us our earliest date for the Palmyrene Temple, 50–51 A.D. The first frescoes were painted in this same century as M. Cumont has pointed out and the supposition is strong that this was the time of building for the larger temple. The indication that this may mark the time of building of the great circuit walls and that the larger temple was built in this corner of the city because of an earlier sanctuary now enclosed in the tower of the walls at this place has been pointed out elsewhere (Inscription H. 2).

M. Cumont's inscription No. 95<sup>1</sup> gives the words Σε]λεύκου [τ]ο[υ] Α[μμ]ωνίου. The date is missing but as the next block gives the date and as most of the blocks from this staircase are dated in the year 60–61 A.D., this inscription may well be the same year. In this case the person mentioned is probably the same as the Seleukos son of Ammonios mentioned in our altar.

L. 6–7. Σελεύκου Λυσίου. An inscription of the year 61<sup>2</sup> gives us a

<sup>1</sup> Fouilles, p. 431.

<sup>2</sup> Ibid., pp. 440–441.



Seleukos, strategos of Dura, and another of the same year<sup>1</sup> mentions a Seleukos son of Lysias, σ(τρατη)Υ(οῦ) καὶ ἐπιστατήσ[αντος] according to the restoration of M. Cumont. Seleukos son of Lysias is mentioned again without his title in inscription No. 89.<sup>2</sup> A person with the same name is mentioned again in No. 52 as στρατηγός πόλεως γενεάρχης but M. Cumont suspects from the type of letters that this is of the third century.

The Seleukos son of Lysias mentioned on our new stone can be none other than the one mentioned in Cumont's inscriptions 116 and 118. It is interesting to see that according to our stone he is holding office both in 50-51 A.D., and 60-61.

The last lines because of the weathering of the stone cannot be restored with certainty. A gypsum block dated 31-32 A.D., found in the "salle aux gradins," bears the inscription Ἀμμώνιος Ἀπολλοφάνου τοῦ Σελεύκου [ἀ]νήγειρεν ὑπέρ τε ἑαυτοῦ καὶ Λυσανίου καὶ ἀδελφῶν σωτηρίας.<sup>3</sup> One expects our new stone to have been erected on behalf of the health or safety or both of an individual and σωτηρίας may I think be restored with some certainty after πόλεως. In what way, however, the formula is elaborated or the passage developed in the next line is not clear. Incidentally one might remark that the stone of M. Cumont is broken across the τε and the reading is not quite clear. It may be that one should supply τῆς rather than τε.

L. 11 seems to read τ]οῖς ἰδίοις ἀν[ε]λ[ώμασιν].

In the year 49 A.D., the Parthian prince, Meherdates, was sent to Syria by Claudius to supplant the hostile Gotarzes as ruler in the East. The Roman legions escorted him to the Euphrates, then intrusted him to his supporters in Mesopotamia, the kings of Edessa and Adiabene. Meherdates, however, dallied at Edessa instead of pushing rapidly forward, and finally moved into Armenia, then across the Tigris, instead of moving at once into Mesopotamia toward the southern capitals. His defeat near the river Corma was the price of this procrastination and the revolt was given up. It is tempting to see in this civil disturbance a cause of the inscription at Dura, addressed to Zeus the Savior on behalf of the chief official of the district. Unfortunately, however, our sources of information are too scanty to allow more than conjecture, and the formulae of the inscription too common to bear the weight of special significance.

<sup>1</sup> *Ibid.*, pp. 440 f.

<sup>2</sup> *Ibid.*, p. 429.

<sup>3</sup> *Ibid.*, p. 427.

## Graffiti.

H. 5. Just to the left of the steps leading to the pronaos of the Palmyrene Temple is a little altar and above to the left, scratched in the plaster in a very cursive hand, is found

εὐνούχι τρίβου σση  
 "Ογηλος  
 Ζήσιος  
 Βορβούλιος  
 5 Θημαρσᾶς  
 Ἀρτεμίδωρος  
 Ζιρίτιος Σ-ιολου

L. 1. Apparently the list is that of the names of the eunuch-priests of a certain tribe at Dura. M. Cumont's Parchment VII gives a list of names under the title φυλή φυζεβειτία. In the present case a name or number follows the word τρίβου but only three of the letters have been inscribed.

It is not uncommon in the Roman period at Dura to find Latin words with Greek endings and vice versa. The present case is a good example of the loose combinations, with "eunuch" spelled in the Greek manner but having a Latin plural ending and the Latin word "tribus" carrying a Greek genitive termination. The Latin title "tribune" on the Main Gate has the genitive form τριβούνου.<sup>1</sup>

It was just on the other side of this east wall of the temple that M. Cumont found the list of names of priests with the name of the month in which each was to officiate (Cumont, Inscription No. 20). His list gives five names none of which corresponds to ours. In this new list we have six names, all from one tribe, and one cannot escape the implication that there were many more in the representatives of other tribes. We must, therefore, consider the Roman period one of great prosperity in the temple's history.

L. 2. "Ογηλος. Chabot remarks that the Palmyrenes had the habit of shortening the forms of their names, though they are given in full when written in Greek in the bilingual inscriptions. So the common name Ogê in Palmyrene becomes "Ογηλος.<sup>2</sup> The prevalence of this name at Palmyra solves the difficulty of the fourth letter which in its sprawling lines might be either tau or lambda.

L. 3. Ζήσιος. The fourth letter is doubtful, either an iota or a tau. Iota

<sup>1</sup> *Rep.* I, p. 33.

<sup>2</sup> Chabot, *op. cit.*, p. 70.

seems more likely, however, and the name is probably to be related to Ζεισαίος found in M. Cumont's Parchment VII, 2.

L. 4. Βορβούλιος. In a graffito on the Main Gate, Professor Rostovtzeff found the name 'Ραββουλᾱ.<sup>1</sup> I am inclined to think we have the elements of the same name here. The first letter of our present inscription is of the same type as that of Professor Rostovtzeff's, and might be either rho or beta. Alpha and omicron are frequently confused in Syria as Cumont remarks.<sup>2</sup> Our inscription reads plainly rho for the third letter, but the lower half of the letter may have been obliterated or a confusion arisen with the following beta to make the common βαρ and βορ form into βαβ and βοβ.

L. 5. Θημαρσᾶς. The name occurs in inscription R. 4<sup>3</sup> and in other inscriptions of the Main Gate.

L. 6. 'Αρτεμίδωρος. The name is common at Dura, see Index to Cumont.

L. 7. Ζιρίτιος Σ-ιολου. The name Seila occurs at Palmyra as well as the names Soadon, and Saêdi,<sup>4</sup> but I can find no exact parallels for either of these words. Possibly the first word is to be connected with the root Ζεβ rather than Ζιρ.

H. 6. On the same wall somewhat below the previous graffito occurs the single word Πολύμηλος in small carefully formed letters, quite different in style from inscription H. 5. The same name occurs in a graffito on the east face of the south pillar between naos and pronaos (Cumont 18).

H. 7. To the left beside the poorly scratched figure of a man occurs a name common in Dura 'Αντίοχος.

#### Inside the Tower of the Temple.

The walls of the older building of the tower (see Building Periods) are covered with graffiti; names and drawings, and with figures hammered or chipped in intaglio on the stones. Most interesting are the chipped figures, represented in a variety of poses, some apparently depicted in combat, some pictured with hands raised in the attitude of prayer, or engaged in a dance. Frequently from the upraised hands a circular band runs above framing the head. A tombstone from Palmyra shows two children with upraised hands, and from the finger tips of the

<sup>1</sup> *Rep.* I, p. 37.

<sup>2</sup> *Fouilles*, p. 378.

<sup>3</sup> *Rep.* I, p. 33.

<sup>4</sup> Chabot, *op. cit.*, pp. 59, 51, and 102.



older a circular band runs above the head.<sup>1</sup> This comes close to the type of figure in our tower. The figures are poorly done, the dress of the subjects done in roughly rectangular outlines, strikingly resembling the type of work executed on Parthian *faïence* coffins, in representing human forms.<sup>2</sup> Sometimes the figures stand alone, sometimes they are grouped two or three together, apparently engaged in the movement of a ritual or dance. The chipping, however, makes interpretation difficult and the subject requires much further study before complete publication can be attempted.

One of the most valuable contributions to our knowledge is the new form we find in the  $\mu\nu\eta\sigma\theta\tilde{\eta}$  inscriptions of the tower. This kind of inscription is by far the most common type of graffito (see Inscriptions of the Main Gate) but instead of the usual form of the verb in the third person subjunctive, the general form in the tower is  $\mu\nu\eta\sigma\theta\epsilon\acute{\iota}\eta\varsigma$ , second person optative, a form repeated once in the northwest tower of the citadel, once in the Palmyrene Gate. We know that this older section of the tower, on the walls of which the graffiti were made, was anterior to the great circuit walls. Apparently then the form  $\mu\nu\eta\sigma\theta\epsilon\acute{\iota}\eta\varsigma$  was at Dura an older form of the inscription so common on the main gate  $\mu\nu\eta\sigma\theta\tilde{\eta}$ ; that  $\mu\nu\eta\sigma\theta\epsilon\acute{\iota}\eta\varsigma$  is the direct antecedent of the form  $\mu\nu\eta\sigma\theta\tilde{\eta}$  may be inferred from the prevalence of this optative in the earlier building, its almost complete disappearance on the walls of the later Main Gate. This earlier optative form, therefore, is most important in helping us to interpret the significance of the later form  $\mu\nu\eta\sigma\theta\tilde{\eta}$ . Recent opinion seems to consider it better neither to take the form  $\mu\nu\eta\sigma\theta\tilde{\eta}$  in the sense given it by Prentice<sup>3</sup> of appeal to the passer-by to remember the author of the stone, nor to accept the interpretation of Scherling<sup>4</sup> who wishes to see in it a second person, but to understand it rather as an address to the divinity. Cumont translates the phrase in the sense "May the deity remember his servant,"<sup>5</sup> and Mouterde accepts this interpretation,<sup>6</sup> restricting his more general explanation of the phrase<sup>7</sup> in view of the Semitic parallel

<sup>1</sup> Chabot, *op. cit.*, Pl. XXIII, 4.

<sup>2</sup> So the figures represented on the Parthian coffin in the University of Pennsylvania Museum and in the Yale Museum.

<sup>3</sup> Princeton University Archaeological Expedition to Syria III, pp. 205-206.

<sup>4</sup> *Hermes*, LIII, 1918, pp. 88 ff.

<sup>5</sup> *Fouilles*, pp. 351 ff. Cf. Jalabert et Mouterde, *Inscriptions Grecques et Latines de la Syrie*, 1929, p. 87, note 1.

<sup>6</sup> *Mélanges de l'Université Saint-Joseph, Beyrouth*, XII, 282.

<sup>7</sup> *Ibid.*, VIII, 449-450.

recalled by Cumont. Mouterde had already suspected that  $\mu\nu\eta\sigma\theta\eta$  expressed a wish and was equivalent to an optative but it was the third person to which he turned, finding as examples  $\mu\eta\sigma\theta\acute{\iota}\epsilon$  (=  $\mu\eta\sigma\theta\epsilon\acute{\iota}\eta$ )  $\delta$   $\gamma\rho\acute{\alpha}\psi\alpha\varsigma$  (Waddington 2465) and  $\mu\eta\sigma\theta\sigma\acute{\iota}$   $\text{Εὐκάρπιν}$  (=  $\text{εὐκάρπιον}$ )  $\chi\rho\eta\sigma\tau\acute{\eta}$   $\kappa\alpha\iota$   $\acute{\alpha}\mu\epsilon\mu\pi\tau\omicron\varsigma$   $\acute{\epsilon}\zeta\eta\sigma\epsilon\nu$   $\acute{\epsilon}\tau\eta$   $\nu'$  (*I.G.*, XIV, 473). The new discoveries show that at Dura not only did the optative idea change to the hortatory but the familiar address in the second person gave way to the more impersonal phraseology of the third. In a very interesting review of the  $\mu\eta\sigma\theta\eta$  formula<sup>1</sup> Nock calls special attention to the form  $\mu\eta\sigma\theta\eta\tau\iota$  which becomes common, but seems in Syria to be limited to Christian inscriptions. This seems to mark a third period when the personal form is introduced once more, this time in the imperative mood. In support of Scherling's interpretation of  $\mu\eta\sigma\theta\eta$  as a second person it may be said that once the form  $\mu\eta\sigma\theta\eta\varsigma$  does occur. The inscriptions in general, however, suggest that the final sigma was carefully added when intended and I believe that the form  $\mu\eta\sigma\theta\eta$  must be taken as a third person. Perhaps  $\mu\eta\sigma\theta\eta\varsigma$  came in the transitional period when the optative idea was giving way to the hortatory but the more impersonal use of the third person had not yet become fully established. It is because of the prevalence of the form  $\mu\eta\sigma\theta\epsilon\acute{\iota}\eta\varsigma$  on the walls of the earlier building of this tower, in contrast to the almost universal form  $\mu\eta\sigma\theta\eta$  on the Main Gate that I think a sharp distinction in date of erection must be drawn between the two. It is interesting in this respect that the one inscription of this type from the northwest tower of the citadel has the form  $\mu\eta\sigma\theta\epsilon\acute{\iota}\eta\varsigma$ . The walls of the citadel raised high above those of the circuit fortifications and not linking with them are obviously anterior in date (see Building Periods).

Professor Rostovtzeff has called my attention to an inscription from southern Syria, between Suez and Sinai,<sup>2</sup> which brings new light to bear on the  $\mu\eta\sigma\theta\eta$  inscriptions. In inscription No. 4668 a and d is found the regular form  $\mu\eta\sigma\theta\eta$  followed by a nominative; but 4668e gives us the plural  $\mu\eta\sigma\theta\omega\sigma\iota\nu$   $\acute{\alpha}\nu\delta\rho\epsilon\varsigma$   $\delta\upsilon\delta$   $\acute{\alpha}\delta\epsilon\lambda\phi\omicron\iota$  "Αμβρο[ς]  $\kappa\alpha\iota$  "Αλιτος  $\acute{\upsilon}\iota$ [ο]ι  $\text{Ἡρώδου}$  and here certainly we must accept the passive sense of the verb, "may these men be remembered." This same interpretation one is tempted to give to the not uncommon inscriptions on Sidonian glass  $\mu\eta\sigma\theta\eta$   $\delta$   $\acute{\alpha}\gamma\omicron\rho\acute{\alpha}\sigma\alpha\varsigma$  and  $\mu\eta\sigma\theta\eta$   $\delta$   $\acute{\alpha}\gamma\omicron\rho\acute{\alpha}\zeta\omega\nu$ , a good example of which is found in the Niessen collection No. 1084 (Pl. XXVII).<sup>3</sup> The vase bears on one

<sup>1</sup> *The Journal of Theological Studies*, July, 1929, p. 393.

<sup>2</sup> *C.I.G.*, III, 4668.

<sup>3</sup> *Sammlung Niessen, Cöln*, 1911.

side the words Ἰάσων ἐποίησεν, on the other the notice μνησθῆ ὁ ἀγοράσας. It is not usual for the maker to advertise himself on the glassware beyond inscribing his name, but quite usual to include a message of good luck to the purchaser, e.g., π[ι]ε ζήσαις ἀεὶ ἐν ἀγαθοῖς; . . . ε ζήσαις καλῶ[ς],<sup>1</sup> etc. One expects, therefore, that the message μνησθῆ ὁ ἀγοράσας would apply to the welfare or happiness of the purchaser and would not be simply an attempt to recall to him the one who had made the vessel. But to interpret it in the sense "May the god remember" in the indefinite address of the common μνησθῆ dedications, with ὁ ἀγοράσας as the signature of the petitioner is far more awkward than to accept the verb as definitely passive and to read "May the purchaser be remembered (by the god)."<sup>2</sup> The wish expressed on glassware that the purchaser should be remembered would therefore be most acceptable to the owner in the same way that wishes for health and good fortune would be.

It is not necessary to interpret all the μνησθῆ inscriptions in the passive sense. The form μνησθείης and μνήσθητι preceding and succeeding μνησθῆ chronologically as well as the Semitic parallel cited by Cumont show very clearly that ordinarily the verb was used in an active sense. On the other hand, the form μνησθῶσιν in *C.I.G.*, III, 4668e proves that the verb was, at least sometimes, used as a passive. Probably the μνησθῆ inscription which formed a part of this same group 4668 a and d should be interpreted in the same way. I am inclined to believe that elsewhere in the wide general use of μνησθῆ throughout Syria the two interpretations were confused and the term employed without specific reference to the exact interpretation, often probably with both meanings in mind.

It is curious in view of the many dates given on the walls of the Palmyrene Gate, that no dates are given in the tower of the temple. Stray letters there are which might be interpreted as dates but never does the word ἔτους occur and there is no clear indication of chronology. Indirectly an inference may be drawn from the fact that sometimes the chipping of the figures interrupts a name, sometimes the name, cut after the figure has been drawn, obscures the picture. The pictures as far as our present knowledge goes must be put in the Parthian period and we may, therefore, infer that the inscriptions also fall in this epoch. This then would agree well with the conclusion that the circuit walls were built late in that period about the beginning of our era. It was later

<sup>1</sup> Kisa, *Das Glas im Altertume*, pp. 960-961, Nos. 240, 241.

<sup>2</sup> Cf. μέμνηται πρὸς τὸν Ἀπόλλωνα, in *Inscriptions from the Main Gate*, below, p. 165.



apparently that the fashion of adding dates to the names came in, and for this reason again I am inclined to doubt Mr. Johnson's interpretation of chance letters on the Main Gate as early dates. (See his chapter on "Inscriptions" placing the walls back to the period of Tigranes III before 182 B.C.).

H. 8. (Block 1) (The diagram [Pl. XXXII] shows the location of blocks in the tower and so the position of graffiti). The first word cut from the middle of the block to the end; the second from the lower center to the end, in lines chipped 8 or 9 cm. high and letters 8 mm. wide.

Λίσαμος  
'Ικκότου

Lisams is a very common name at Palmyra<sup>1</sup> but I have as yet found no parallel for 'Ικκότου. The reading, however, is clear and verified by the graffito on block 3 where the nominative is given.

H. 8b. (Block 1) Upper left hand corner the single letter delta chipped 9 cm. high, in lines one cm. broad.

H. 9. (Block 3) Just above the center, clear letters 13 mm. high.

'Ικκότους

H. 9b. Top center very faint letters scratched with point, 25 mm. high.

ΙΟΥ

On the block in the upper right hand section also is scratched a small graffito of a man 0.06 m. high, very crudely done. Above him is represented the head of a bird with plumes, apparently one of the bustards mentioned by Xenophon (the modern outardes). The representation of the bird is much superior to that of the man.

H. 10. (Block 9) Above the back of the lion in faint letters.

μνησ[θε/ης]

The block carries the representation of a man done with scratch point in the left center. The picture is 0.10 m. high and poorly done. Better is the representation of a lion 0.30 m. long and 0.16 m. high, quite well executed with great mane and hanging tongue, in the act of leaping or running (Pl. XLII, 2).

Block 17 is without inscription but adorned with representations ap-

<sup>1</sup> Chabot, *op. cit.*, pp. 48, 49, 61, etc.

parently of a Boeotian shield 0.07 m.  $\times$  0.03 m. in size made with scratch point (in the upper left corner) and in the lower center with a lion crouching and raising its forepaws. This latter picture is also made with the scratch point, is 0.23 m.  $\times$  0.16 m. in size, and rather poorly done, the head partly blotted out by weathering.

Block 33 (no inscription) bears the first of a series of chipped figures, in the lower left a person with hands upraised to either side of the head. Dimensions, 0.34 m.  $\times$  0.14 m. In the lower right of the block appears a standing figure done in very crude style, 0.22 m. high.

H. 11. (Block 39) From center to right, in scratched letters 0.07 m. high, two letters running over into the adjacent block.

[μν]ησθείης Τιμαρχος

Only the upright line of the tau is visible but the rest is clear. Timarchus was, of course, a common Greek name, and famous in the East from the revolt of Timarchus against Seleucus IV in 162 B.C.

H. 12. (Block 39) Just below inscription H. 11, in faintly scratched letters 0.03–0.06 m. high.

Ναξοις

The third letter is very doubtful. The name might be associated with that of Νάσσιος or Ναθήης though neither is common.<sup>1</sup> The closest parallel at Palmyra is apparently Nesa<sup>2</sup> but the reading here is too doubtful to give certainty.

H. 13. (Block 39) Lower right letters clear 0.02 m. high. Two letters on adjacent block.

Πάρμυς Ἡλιοδώρου

Ἡλιοδωρος is a common name at Dura but I can find no parallels for Πάρμυς. Between the names is a scrawled zigzag and it may be the first name is longer. Παρμενίς occurs<sup>3</sup> and in Egypt Παρμαῖτες, Παρμίθης and Παρμενᾶς (Preisigke's *Namenbuch*) but to which stem our own word is related is difficult to determine.

H. 14. (Block 41) Above the center of the block in scratched letters 0.02 m. high.

μνη[σ]θείης  
Βα[ρ]λάας

<sup>1</sup> *Inscriptiones Graecae ad res Romanas pertinentes*, IV, 1703, and 1367.

<sup>2</sup> Chabot, *op. cit.*, p. 42.

<sup>3</sup> *Inscr. Gr. ad r. R. p.*, IV, 208.

The nu is written with crossbar running from the bottom of the first upright to the top of the second. Epsilon and iota after theta are so written together as to appear almost like an eta. The sigma is omitted in *μνησθείης* and rho in *Βαρλάας*. The name *Βαρλάας* must, however, be intended for it is known at Dura (Cumont No. 44b) and occurs again on block 49.<sup>1</sup>

In the lower right hand corner of the block is chipped a dancing figure facing front with hands raised beside the head and holding a wreath or fillet which circles the head from hand to hand. 0.30 m. × 0.10 m.

H. 15. (Block 49) Across the whole block, letters chipped 95 mm. high and the lines 10 mm. wide.

*μνησθείης*  
*Βαρλάας*  
*Ζεβιαλάας*

The first sigma in *μνησθείης* has been introduced as an afterthought above the line.

Cumont records *Ζεβειδάος* in his seventh parchment, *Ζεβιδινᾶς* in the fourth parchment, *Ζεβιδάδαδος* in inscription No. 50 and *Ζεβιδάδος* in inscription No. 121. Our name seems a new one unless with the confusion of alpha, lambda, and delta in the capital letters, we may make *Ζεβιδάδος*. We must remember, however, that *Ζάβδελας*<sup>2</sup> occurs and that the many forms of transcription from the Semitic original make possible the form as it is. If change should be made it would appear that the first alpha should be interpreted delta in view of the prevalence of the Semitic root form.

H. 16. (Block 49) Lower center in scrawling letters.

*Ἑλιόδωρ[ος]*

The two final letters would have run over to the adjacent block but were omitted by the writer. The word *μνησθείης* may have been written before the name, but chipping has made the reading impossible.

In the upper left hand portion of the block is chipped a little dancing figure again with upraised hands and wreath circlet 0.19 m. × 0.09 m.

<sup>1</sup> Cf. Jalabert et Mouterde, *Inscriptions Grecques et Latines de la Syrie*, 1929, No. 84, note 1, *Βαρλάα* = *Θεότεκνος*.

<sup>2</sup> Vogüé 5 and 15.



The broad letters chipped in the block obscure the form of other representations.

H. 17. (Block 53) In the upper left hand scratched letters 0.04 m. high.

Ανδρ

This may have been the beginning of a name like 'Ανδροκλῆς or the middle of the name Alexander or Menander, but the last two letters do not seem to be in the same hand. The two pairs could, of course, represent dates but the lack of further indication makes this suggestion extremely improbable.

H. 18. (Block 53) Upper right. Faintly scratched letters 15 mm. high.

μνη(σθείης)  
'Αββᾶς  
Βοάλου

The name Abbas is known in Syria from the report of the Princeton expedition.<sup>1</sup> In Palmyra Bôlha, Balai, and Bôla are all found in the Palmyrene inscriptions.<sup>2</sup> The root of our name is evidently related to this class of names though we have not the exact parallel in the Greek inscriptions of Palmyra.

H. 19. (Block 53) Upper left, chipped clear letters 0.06 m. high, the lines 10 mm. broad.

Πατροκλῆς

In the upper right hand corner of the block is chipped a figure represented as dancing toward the left with semicircular band or wreath above the head. From the figure stretches a second band, like a belt or scarf flowing behind. Dimensions 0.27 m. × 0.15 m. In the upper center a second figure rather obscured by the name also holds a wreath. Across the bottom of the block is depicted a group of three, a figure to the left standing with one hand extended, the other resting on the hip, in the center a figure advancing right with raised hands and wreath, on the left a man with upraised hands advancing left.

On block 57 there is represented chipped or hammered in the block a man with raised hands and wreath circling the head from hand to hand

<sup>1</sup> Princeton Expedition to Syria, 614, 'Αββᾶ, genitive case.

<sup>2</sup> Chabot, *op. cit.*, pp. 62, 69, 120.

in the usual manner. He stands apparently on pillars. The figure is 0.56 m. high, the pillars beneath the feet 0.15 m.

Block 59 has in the lower center small heads of three horses poorly scratched with a point. Letters ονος 0.05 m. high but apparently not connected with the drawing despite the implication, appear in the center of the block. They are probably the ending of some name.

H. 20. (Block 61) Water dripping down from a squeeze caused to flash out from beneath the sooty background of the block, as if by magic letters in ink, a petition and vow inscribed to Zeus.

Βαργά - - - της 'Ρηχάβους  
ἐὰν γένηται αὐτῷ μόσχον  
δοῦται Δίι

The letters when water is applied are vivid and clear, fading back when dry so as to be almost indistinguishable. Only the chance touch of water on the inscription rescued them from their long obscurity.

Part of the block has been chipped away in the middle of the word Bargates but it is probable that no letters need be supplied. The only letter not entirely clear is "B" of which the upper curve is missing. It is of course a common name at Dura (Cumont Inscriptions, Nos. 18, 6b, 21, and 31).

L. 1. 'Ρηχάβους does not occur though the last part of its root 'Αχάβου(ς) is not uncommon (Cumont, Nos. 20, 7, and 127).

Cumont suspects that in inscription 7 it may in fact be joined to a suffix Βηλ]αχάβους. M. Levi Della Vida's very interesting note<sup>1</sup> informs us that the forms Βηλάκαβος, 'Αθηνάκαβος written with kappa, are apparently connected with the Semitic root Yā'qōb, "to cause to follow." If so it must be distinguished from the root written with chi which transliterates the Hebrew root meaning "brother of the father."

L. 3. δοῦται, probably for δῶται in the sense "will give the calf on his behalf to Zeus."

L. 3. Δίι Zeus was the chief divinity revered in the tower as we know from the earthquake inscription inscribed to the greatest Zeus.

The meaning probably is "if his wish is fulfilled he will give a calf to Zeus." It might refer, however, to the birth of the calf with the meaning "if the calf is born, he will give it (the calf) to Zeus." One recalls the graffito of the same type (Cumont, No. 16) written on the great

<sup>1</sup> *Fouilles*, p. 363.

scene of sacrifice τοῦ ποιμνίου καμ[ό]ντος Μάεμος τοῦ θεοῦ [ἐδεήθη]ν π[ρό]-  
βατα κὲ ἔξω ἀρνεία ἑπτά. One might infer from our present inscription that  
conditions in the herd were similar to those described in Cumont's  
graffito. In our case apparently the herdsman was afraid of losing the  
cow as well as the calf and vows the calf to Zeus in case it is safely  
delivered.

On block 63 is scratched with point the picture of a man with great  
shield fighting a lion. The picture is crude but done with spirit (Pl.  
XLIII, 1). Dimensions 0.25 m.  $\times$  0.30 m. The man is depicted in pro-  
file contrary to the usual Parthian custom and the almost universal rule  
in the tower.

The face of block 67 had been cut away, then a gypsum front was  
plastered into place to make a pocket behind, a receptacle, however,  
which unfortunately was found to be empty.

On block 69 is represented a figure with wreath perhaps standing be-  
side an altar. Dimensions of the drawing 0.45 m.  $\times$  0.23 m. To the  
right stands a second figure also in the curious hammered or chipped  
style, the figure represented with a sort of tiara on the head. The figure  
itself with legs disproportionately small is 0.17 m.  $\times$  0.25 m., and the  
object on the head 0.03 m.  $\times$  0.01 m. Above in the upper right corner  
stands a figure with arms raised, 0.17 m.  $\times$  0.13 m.

Block 71 shows to the left a series of circles above the representation  
of a table or altar, then the scratched representation of a man with  
spear 0.26 m.  $\times$  0.15 m.; finally a group of three figures chipped in the  
block 0.23 m.  $\times$  0.60 m. On the left there is a figure facing front hold-  
ing something in the right hand (perhaps a shield) and grasping the  
end of some trailing object (scarf or fillet) in the outstretched left. The  
second figure advances right holding shield and with scarf flying, while  
the third advances left apparently shooting at the center figure with bow  
and arrow.

In the lower right portion of block 73 is represented again chipped  
in the block in intaglio a figure with wreath 0.25 m.  $\times$  0.15 m. In the  
left center appears a boy dancing with upraised hands 0.15 m.  $\times$   
0.06 m.

H. 21. (Block 75) Upper edge of block in letters 0.02 m.

κρ001 - 5

H. 22. (Block 75) Lower center, letters 25 mm. high, all apparently  
in the same hand.



ΑΚΕ --- ΚΑΥ - ς

Να --- ΝΑς

Chipping has obliterated the letters in the center of the names.

H. 23. (Block 75) Upper right, scratched with point in scrawling letters 0.10 m. high.

ΝΙΚΑΝΩΡ

This name, famous at Dura because of Nikanor its founder, occurs also in Cumont's inscription 79. The last two letters are difficult to read.

H. 24. (Block 75) Just to the right of the name Nikanor in letters 15 mm. high.

ΔΑΔΟΣ

In the report of the Princeton expedition we have, Dados, Ados, Addos, Adios, and Adeios.<sup>1</sup> The name Dadeas occurs in Colophon.<sup>2</sup> In our inscription the second and third letters are almost illegible.

In the lower central portion of block 75 is chipped a figure with arms raised and circlet wreath 0.24 m. × 0.15 m. Other chipping represents perhaps similar figures.

Block 77 contains apparently a figure similar to that on block 75; dimensions 0.20 m. × 0.18 m.

H. 25. (Block 81) Upper center, chipped letters 0.10 m. high, the lines 0.01 m. broad.

ΠΑΤΡ(ΟΚΛΗς)

The figures chipped in intaglio on this block seem especially interesting, one representing apparently two boats with high sterns and steering oars. On the deck of each stands a man. The boats are 0.38 m. long and the representation 0.28 m. high.

#### North Walls.

The blocks on the front wall to the right as one enters and on the north wall are numbered with even numbers in the diagram (Pl. XXXII).

It seems worth while to include here the name on block 2 published

<sup>1</sup> Princeton University Archaeological Expedition to Syria, Nos. 419, 62, 738, 366, and 803.

<sup>2</sup> Dittenberger, *Orientis Graeci Inscriptiones*, 530, 12.

by Cumont (No. 45) just to make a complete catalogue of the inscriptions in the tower. It was only here beside the door that M. Cumont reached the level of the inscribed blocks, his work being unfortunately held up by the great blocks fallen from the top of the tower.

[H. 26. (Block 2) Cumont, No. 45.  
Σεμισιάβος]

H. 27. (Block 19) Upper center scratched neatly in letters 0.02 m. high.

μνησθείης  
Νι[κάνωρ]

There is ample space between theta and eta for  $\epsilon$  but the remains of the letters are very slight. Not a trace of letters remains after Νι. The name could, therefore, be any one of half a dozen.

H. 28. (Block 28) Center of block, letters scratched 3-4 cm. high.

μνησθ[είης] Βαρράβας  
πρὸς Διί

Chipping of the block cuts off the end of the word  $\mu\eta\sigma\theta\epsilon\iota\eta\varsigma$ . Unfortunately the same cut descends to make doubtful the end of the reading. The letters given are clear but it is possible that other letters followed to make the second line into one name. As it stands, however, it is complete in itself, the individual expressing his wish in the temple of the god and subscribing himself as "in the presence of Zeus" or "near Zeus." The discovery of the earthquake stele and the dedication to Zeus in ink within the tower lends credence to the view that the supreme god is named also in this inscription, the suppliant calling special attention to his position close to the god.

The name Βαρράβας is of course common, and though the first rho is by no means clear on the stone it seems possible to transcribe it with certainty.

In the upper right hand portion of block 28 is chipped in intaglio the head and shoulders of a man with hands raised 0.10 m.  $\times$  0.14 m. Just below and to the right, appears a smaller figure dancing with hands raised.

H. 29. (Block 38) Lower center scratched with multiple lines 0.10 m. high across the neck of the great figure.

Βηλιαίος

The word is probably the name of an individual and is not related to the figure, apparently that of a divinity, through which it is scratched.

The names Beliada<sup>1</sup> and Belakabos<sup>2</sup> both occur at Palmyra. Dittenberger<sup>3</sup> also gives Βεελίαβος. Our name is evidently from the same root but the termination is uncertain.<sup>4</sup>

H. 30. (Block 38) Written through the αι of Βηλιαίας in small scratched letters 1-3 cm. high.

Bααθ  
- βιδια - σ - -

The second name is apparently some combination of the root Ζεβιδ but the exact transcription is uncertain.

Part of a most interesting representation appears on this block, the head and shoulders of a figure apparently of a god for the visage is rayed (Pl. XLI, 1). The figure extends to blocks below, the left hand reaching the head of a lion erect upon its hind legs, the right touching the head of a lion erect also but resting its head on the divinity's knee. The representation calls to mind at once the heraldic designs so common in the East, of the divinity pictured between two beasts. With the earthquake inscription this figure seems to offer good evidence that the older structure of the tower was not sanctified simply by its inclusion within the precinct of the temple, but had special claims to holiness perhaps even before the great walls and the new temple were erected. Dimensions of the figure, 0.48 m. × 0.40 m.

H. 31. (Block 40) Lower left, in faintly scratched letters 0.03 m. high.

μνη - - σ  
Μα  
Β

H. 32. (Block 40) Lower left, faint letters 18 mm. high.

Βαιχ

The letters are perhaps to be associated with the name Baida or that

<sup>1</sup> Chabot, *op. cit.*, pp. 13 and 121.

<sup>2</sup> Dittenberger, *Or.*, 639, 8 and 644, 3.

<sup>3</sup> *Ibid.*, 611, 4.

<sup>4</sup> Cf. Jalabert et Mousterde, *Inscriptions Grecques et Latines de la Syrie*, 1929, No. 174A. [B]ηλω θεω.



of Bakkai, both found at Palmyra. The root Βάκχ or Βακκ is common. Dittenberger gives also from Palmyra Βαιδᾶς.<sup>1</sup>

H. 33. (Block 46) Lower center, faint letters 10 mm. high.

- ον Διονυσίου

There are no letters distinguishable before ον.

H. 34. (Block 48) Left top and center in scratched letters 0.09 m. high.

μνησθῆ Διόδω  
ρος Ἀρχ[ελάου]

This is the single case of the form μνησθῆ in the temple but the reading seems clear. The letters after Ἀρχ are indistinguishable and the name might be any one of several.

H. 35. (Block 48) Written through the previous inscription in faint point scratching letters 0.03 m. high.

μνησθῆ[η]ς

The three letters after theta are not clear but the space allowed and the fragments of letters with the sigma makes the reading clear. A name follows, but the letters are so obscured by those of inscription H. 36 as to be illegible.

H. 35b. (Block 48) Lower left, the three letters μνσ.

Evidently an abbreviation of μνησθείης, interesting as possibly showing that for the abbreviation of the second person the sigma was added to the μν.

H. 36. (Block 48) Lower left center, scratched letters 0.03 m. high.

Ἀλέξα[νδρος]

H. 37. (Block 48) Lower right, scrawling letters scratched 0.02 m. high, the word Νικολάου running over into block 40.

μνησθείης Ἀλέξανδρος Νικολάου  
Διαγόρας

All are common Greek names but only the name Alexander has thus far been found at Dura. Διαγόρας is clearly written on block 58 (inscription H. 45).

<sup>1</sup> Dittenberger, *Or.*, 641, 3.

H. 38. (Block 54) Center faintly scratched lines 0.08 m. high.

χόσπας

The letters seem clear but I am unable to find a parallel for the name.

H. 39. (Block 54) Across the bottom, faint letters scratched 0.05 m. high.

Προσ ---- καὶ Πο - πνησ

The first word might be Πρόσδεκτος. The last four letters seem possibly to be the beginning of μνησθείης for mu made with three straight lines is easily confused with pi.

H. 40. (Block 56) Upper right, letters 0.05 m. high.

μνη[σθείης]

Below in center, possibly going with the letters above though in quite a different hand and letters of different size, 15 mm.

Ἀλέξα[νδρος]

One chipped figure cut in intaglio appears on this block, again apparently a person dancing with raised hands and wreath 0.28 m. × 0.18 m.

H. 41. (Block 58) Scratched across top letters 0.05 m. high.

μνησθείης Διόδωρος

H. 42. (Block 58) Faint, scratched letters across center 0.06 m. high.

Ἀντίοχος

H. 43. (Block 59) Left center, letters 8 mm. high.

μνησ[θείης]  
Διόδωρος Ἀχάβου

Ἀχάβου appears as a genitive in Cumont's inscription No. 20 and with that parallel I restore beta here for the faint traces of a letter between alpha and omicron.

H. 44. (Block 58) Through center, letters 25 mm. high, the first three letters on block 66 to the left.

μνησθείης Ἀλέξανδρος

H. 45. (Block 58) Lower left, letters 0.03 m. high, three letters on block 66.

μνησθῆς Διαγόρας

The form μνησθῆς here may be intended for the usual form μνησθείης or may be a use of the hortatory subjunctive (see discussion above).

H. 46. (Block 64) Center and right, letters scratched 0.03 m. and 0.09 m. high in the different lines though apparently in the same hand.

μνησθείης Χαιρέας Νίκωνος  
τοῦ Μενάνδρου Εὐρωπαῖος πρὸς ---

Νίκωνος: the name occurs in Cumont, inscription No. 120.

Χαιρέας: the name is quite common<sup>1</sup> though not occurring elsewhere at Dura. The name Μένανδρος seems to appear also on block 68, inscription H. 49.

Εὐρωπαῖος was found by Cumont in Parchment I, 3, and in Parchment II, B, 25. It occurs also on the Main Gate, see below, D. 45.

Unfortunately the last letters are not clear.

H. 47. (Block 64) Lower right letters 55 mm. high.

μνησθείης Σέλευκος  
Κόνωνος Εὐρωπαῖος τῆς αὐρῆς

Σέλευκος and Κόνων are two of the most common names at Dura, though they do not appear in the same family.

Again the important letters after Εὐρωπαῖος are most difficult to read and make no clear meaning. One is tempted to read alpha as delta for they are written much alike, and take the sense as "of (the district of) Dura" but one violates both the common Greek spelling of the root Δουρ and the common ending alpha rather than eta.

H. 48. (Block 66) Across center, chipped letters 45 mm. high and with lines 10 mm. broad.

Ἡλιόδωρος

H. 49. (Block 68) Just below center, letters 8 mm. high.

Μένα[νδρος]

H. 50. (Block 74) Upper center faint letters 10 mm. high.

μνησθείης Ἡλιόδωρος Καλλινίκου ----- τοῦ Νίκωνος ----

<sup>1</sup> *Inscr. Gr. ad r. R.* p., 153; 155; 1525.



H. 51. (Block 74) Left center faint letters 12 mm. high and spaced apart to avoid chipping in the block.

Ἡλιόδωρος

H. 52. (Block 74) Lower center scratched letters 10 mm. high.

μνησθείης Νικόστρατος Νικο[στράτ]ου

The name is common at Dura though this combination of father and son does not occur.

H. 52b. (Block 74) Center chipped letters 0.10 m. and 0.06 m. high, respectively.

ΚΔ

H. 53. (Block 80) Lower center scratched letters 0.05 m. high.

Αὐδάλι[ος]

Chabot reports the name Audel from the Palmyrene inscriptions.<sup>1</sup> There is no sign of an ending after the iota on the block.

H. 53b. (Block 94) Letters 0.09 m. high.

Λσ

Both this pair of letters and that of H. 52b could be dates but the supposition seems dangerous in view of the lack of any clear attempt to record dates in the tower and the lack of their connection with any special names.

This completes the inscriptions on the walls but there is one further representation, a group of three figures chipped across the whole face of block 84, all with hands raised, a round object apparently a wreath between the central figure and the one on the right. The central figure apparently wears a tiara. Height of figures 0.60 m. Dimensions of tiara 70 mm. × 25 mm.

H. 54. Scratched on the right hand side of the great plaster plaque in the tower.

Δέκατις

### 3. *The Baths.*

H. 55. A brick found in the apsidal room of the Baths, evidently one

<sup>1</sup> Chabot, *op. cit.*, p. 82.

that had been built into the wall for it was still half covered with plaster, bore the inscription scratched on the surface before it was baked.

μνησθῇ  
[Ι]ούλις Βάσσοϛ  
Μαρίνο[υ]

Ιούλις, the same spelling of the ending ιοϛ for the Latin singular is found in graffiti R. 6 and R. 7,<sup>1</sup> and is quite common at Dura. The name is certainly that of Julius.

Βάσσοϛ occurs again in Cumont's inscription No. 44.

For the name Μαρίνοϛ cf., Professor Albright's note on Cumont No. 129 below (pp. 170 f.).

H. 56. Scratched on the plaster above the bench on the east wall of room D of the Bath.

Ἀλέξανδροϛ

H. 57. Scratched on north pillar of room C.

μνησθῇ Μαρ[ίνοϛ]

#### 4. *The Northwest Tower of the Citadel.*

H. 58. On the wall just before the entrance to the tower, and to the north, chipped letters.

Πε[ρπ]έρηϛ Ἐπινίκου

The last word is clear and verified by its occurrence again inside the tower. It is a well-known Greek name.<sup>2</sup> The first word is broken by chipping in the block which leaves only the first and last two letters clear. I am inclined to think the name is Περπέρηϛ which occurs in inscription No. 1434 of *Inscr. Gr. ad r. R. p.*, or possibly Πεισίνηϛ.<sup>3</sup>

H. 59. Close to the west corner of the tower on the northwest wall, in chipped letters.

μνησθείηϛ Νικαγό  
ραϛ Διοδότου

Νικαγόραϛ occurs once in Cumont's inscriptions (No. 26), Διόδοτοϛ many times (see Index to Cumont).

The form μνησθείηϛ is clear and links the formula of the inscription to

<sup>1</sup> *Rep. I*, p. 35.

<sup>2</sup> Fick, *Die griechischen Personennamen*, s.v. Νικ.

<sup>3</sup> Fick, *op. cit.*, s.v. Πεισ.

those of the Tower of the Palmyrene Gods. It is the only case of this type of inscription in the tower of the citadel.

H. 60. On this same northwest wall, close to the north corner, in small scratched letters 0.03 m. high.

Δ[ι]καισκλης Θεοκλοῦ  
Θεμίσων Ζεβινναναίου

Dikaeocles and Theocles are both names known in Greek.<sup>1</sup> Themison is well known in Egypt<sup>2</sup> and Ζεβινναναίου is made up of the common Semitic root Ζεβιδ and the name of the great goddess at Dura, Nannaia.

H. 61. On the southwest wall near the center in scratched letters 0.04–0.08 m. high.

Κόνων ----- καὶ ---  
καὶ Διοκρίτας  
Ἐπινίκου παιδία

L. 2. On the stone the name seems written Διοκρίτας but I can find no parallel for it and I believe that the doubtful letter can be interpreted as a sprawling rho as well as a lambda.

H. 62. To the right of the previous inscription, letters 0.04 m.–0.08 m. high, and apparently in the same hand as H. 61.

Καφει[σίας] ----  
σα Ἐπινίκου  
παιδία

L. 1. The last part of the name is gone entirely. The first letters, however, are clear and it seems possible to restore the end from the name Καφισίας common both in the east and in Egypt.<sup>3</sup>

H. 63. To the left again close to the south corner a still more unsatisfactory group of letters possibly going with H. 61.

Μηδε ----- μιδ

<sup>1</sup> Fick, *op. cit.*

<sup>2</sup> Preisigke, *Namenbuch*.

<sup>3</sup> Cf. Dittenberger, *Or.*, and Preisigke's *Namenbuch*.



### III

## INSCRIPTIONS

BY JOTHAM JOHNSON

### I. INSCRIPTIONS OF THE PALMYRENE GATE

#### *Preliminary Note.*

THE following report continues the publication of the inscriptions of the Palmyrene Gate, begun in the previous report on the Yale Excavations at Dura-Europos. Professor Rostovtzeff there published twenty-three inscriptions in Greek cut on the walls of the passage of the Gate, and six Greek, two Latin, and two Palmyrene inscriptions from altars and other inscribed monuments found at the Gate. Herewith are one hundred and forty-three Greek inscriptions from the walls of the Gate; six Safaitic inscriptions (published by Professor Torrey, pp. 172 ff.) also on the walls of the passage; two Greek texts and one in Latin from inscribed objects from this section of the excavations; and a Palmyrene inscription lately found on the bas-relief of Herakles of which the Greek inscription was published in the first report, p. 47. The harvest of epigraphical records at the Gate, then, totaled one hundred and eighty-seven.

A new font has been cut for the Greek inscriptions in the square letters which form the majority of this series:

ΑΒΓΔΕΖΗΘΙΚΛΠΝΞΟΡΡΤΥΦΧΨΩ 59

A few important inscriptions in other characters, particularly those in cursive hands, are reproduced in facsimile. These facsimiles were made by tracing inked-in squeezes, and must not be regarded as exact mechanical reproductions. About thirty inscriptions appear on the several photographs accompanying the text. D. 79 to D. 83 form a typical early group in large (0.08 to 0.10 m.) letters,<sup>1</sup> reminding one of the vague inscriptions hammered on the rocks of the Safa. The purpose of cutting

<sup>1</sup> M. Cumont has pointed out (*Fouilles*, pp. 352-353) the derivation of these letter-forms from the inscriptions on Hellenistic coins. This is shown with startling emphasis in the inscriptions from the Temple of Artemis, where the numismatic device of connecting drilled holes with straight lines is carried to an extreme, necessitating a new shape of pi, Π, to distinguish it from mu, μ, and of beta, β, to distinguish it from theta, θ.

—if they were actually cut instead of hammered—was only to freshen the surface of the stone for the reception of red (in two instances black) paint, and the strokes are often extremely shallow; indeed, the presence of certain of the inscriptions was not suspected until the lantern of a night visit threw sharper shadows than the sun.

Plate XVII is a working plan of the stones of the lower, the inscribed, courses of the walls of the passage, showing the locations of the inscriptions according to their numbers in the two reports. This is intended not only to aid those students who will study the inscriptions *in situ*, but to convey some impression of the disposition of these texts upon the walls. With this may be compared Pl. XVI, which gives an enlarged view of a portion of the second court of the passage.

1. *Inscriptions on the South Wall of the Passage.*

D. 1.  $\mu\eta\sigma\theta\eta\ \text{Ναοβιαρίβωλος}$ .

0.36 m. long, 0.06 m. high. Average height of letters 0.02 m. Graffito. Roman period. The first element of this name has not been explained; the rest is the ordinary Greek transcription of the Palmyrene divine name *Yarhibôl* ( $\text{ירהיבול}$ ), as Dr. Albright pointed out.

D. 2.  $\text{Αχατακις}$

0.30 m. long. Average height of letters 0.045 m. The strokes reproduced are deeply cut. I can suggest no more complete reading.

D. 3.  $\mu\eta\sigma\theta\eta\ \text{Σηλαῖος Βαρναίου}$  E.

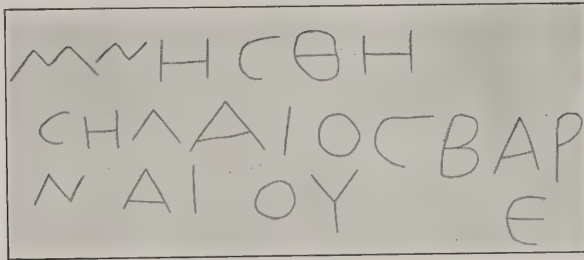


Fig. 5.

0.48 m. long, 0.16 m. high. Average height of letters 0.045 m. Roman period. The letters are deeply cut, but the stone has weathered badly. The same individual is represented, under several different spellings, in

D. 41, D. 67, and D. 100. Professor Torrey has supplied the following note on these names:

“Σηλαιοϛ is ܫܠܝܐ, Aramaic hypocoristicon, as though from ܫܠܢܒܕܐ, ܫܠܢܒܐ, or the like. The Hebrew name Saul, ‘asked’ is its equivalent. Βαρναιοϛ is a similar form. From *Bar-Nēbō*, the Barnabas of the N.T. Βαρβαρναιοϛ is simply ‘son of Barnai.’”

The name Barnaios has already been encountered at Dura (Cumont, *Fouilles*, Index) but Selaioϛ here appears for the first time.

D. 4.                    ///σγηη  
ρακοϛ///  
λιου Μ  
αλίχο[υ]

0.39 m. long, 0.32 m. high. Average height of letters 0.05 m. The right-hand half of this inscription is hidden behind a plaster altar of later construction. The name Malichos is common at Palmyra and elsewhere in Syria. At Dura cf. D. 35 and Cumont, *Fouilles*, No. 10.

D. 5.                    ΑΚΕΙΒΡΙ                    Ακειβρι  
ΠΗΠΑΙΑ                    Μημια

0.45 m. long, 0.18 m. high. Average height of letters 0.085 m. The letters are large and shallow. Earliest period.

D. 6.                    ΠΗΝ□ΦΙΛ///                    Μηνόφιλ[οϛ]  
ΣΕΛΕΥΚΟΥ                    Σελεύκου

0.60 m. long, 0.15 m. high. Average height of letters 0.065 m. Pre-Roman period. Menophilos has appeared once at Dura, in Cumont, *Fouilles*, No. 66. Seleucus is frequent.

D. 7.                    Ε////NHCE//NI

Average height of letters 0.05 m.

D. 8.                    /////  
///Γ  
ΧΕΙΝ

Average height of letters 0.045 m. Dipinto. This inscription is painted in red on white plaster ground, the whole enclosed in a wreath in white and green. With this wreath may be compared those in the frescoes in the Temple of the Palmyrene Gods, Cumont, *Fouilles*, Pls. LV, LVI,



D. 9.                      ΣΑΛΑΠΙΣ                      Σαλαμινς

D. 10.  $\Delta H///N//$   $\Delta_{\eta\mu\mu\eta}$

D. II.                    ΗΡΑΚΛΕΙΔ//////                    'Ηρακλείδη[s]

D. 12.            ΑΡΤΕΠΙΔΩΡΟΣΛΡ' |            Ἀρτεμίδωρος λρ'  
                 ΠΝ                                  μν

D. 13.            ΟΛΥΠΠΟΣ            Ὀλύμπος

D. 14.            N  
M ΜΑΡΕΙΝΟC            μν(ησθη) Μαρεῖνος

D. 15. MNH COH μνησθή  
 ΑΛ///ΚΑΕ Αλ[ . . . ]κας  
 ΔΑΝ///ΜΟΥ Δαν[ύ]μου

Average height of letters *ca.* 0.04 m. Very faint graffito, similar to D. 14. For the name *Δάμνιος* cf. Cumont, *Fouilles*, p. 414, and D. 23 below.

D. 16.           ////////IAABOC                           [Σεμισ]ιάβος (?)

Average height of letters 0.06 m. Pre-Roman period. Cf. Cumont, *Fouilles*, No. 45, and D. 141, below, for the name.

D. 17.           ////////Κ□□

Average height of letters 0.05 m. This has been listed separately as having seemingly no connection with D. 16.

D. 18.           ΤΠ.ΙΠΛΥΛ.ΡΓΚ□

Average height of letters 0.06 m.

D. 19.           Σηλαῖος

0.58 m. long; average height of letters 0.09 m. The letters were filled with a thin coating of plaster. Removal of this disclosed the letters bright with red paint.

The name is met elsewhere on the Gate, in D. 3, D. 41, D. 67, and D. 100, but the character of the letters is so different that it can hardly be the same individual here.

D. 20.           μνησθῆ Μανέος Λυσ[ίου]  
                  'Ραθίνου καὶ 'Οναγεινῶς

0.57 m. long, 0.07 m. high. The letters average 0.025 m. in height. The inscription is very crudely cut.

The name Μανέος has already been met at Dura; cf. Cumont, No. 34. Lysias is established as a common reading in the city, though the restoration here is not certain. 'Ραθίνης is the name of a Persian mentioned by Xenophon; the name has been discussed by Justi (*Iranisches Namenbuch*, p. 260). The last name, 'Οναγεινῶς, has been declared non-Semitic by Professors Albright, Kraeling, and Torrey, and non-Iranian by Professor Gray. It is possibly a new Macedonian name, a genitive form in -ως for -εως from a nominative 'Οναγεινεύς.

D. 21.           μν(ησθῆ) Νε-

This is a graffito cut in very large, crude letters on the plaster of the third-century frescoes over the doorway into the south tower.

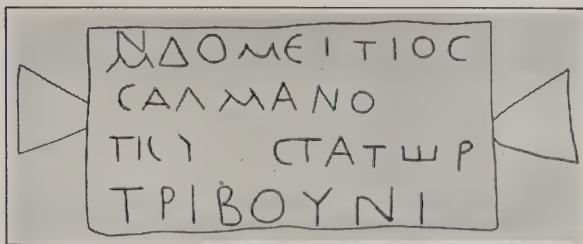
D. 22.           μν(ησθῆ) Φλά[ουιος]

This is a very faint graffito cut just under R. 8a. Average height of letters 0.03 m. The name is known at Dura; cf. Cumont, No. 131.

D. 23.            ΗΡΑΚΛΕΩ///            Ἡρακλέω[ν]  
                  ΔΑΝΥΠΟΥ            Δανύμου

0.75 m. long, 0.21 m. high. Average height of letters 0.09 m. Earliest period. Herakleon was not encountered by M. Cumont at Dura, but appears again in D. 88 and possibly also in D. 76, D. 122, and D. 125. The name *Danymos* was conjectured by Cumont (*Fouilles*, p. 114) to be Macedonian. It appears again in D. 15 and D. 97.

D. 24.



μν(ησθῆ) Δομείτιος  
 Σαλμάνο[ν]  
 πον. στάτωρ  
 τριβούνι

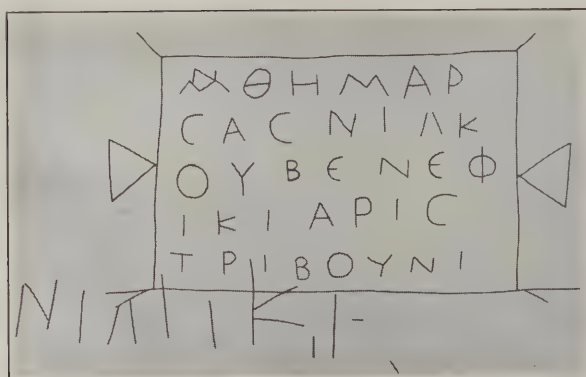
Fig. 6.

This inscription is cut within a curious *tabella ansata* whose corners are adorned with small palm leaves. It measures 0.32 m. by 0.175 m. The letters average 0.03 m. in height. The stone is crystalline and poorly preserved. Traces of red paint remain in the letters.

Domitius is a well-known Latin name; Σαλμάνης is frequent in the inscriptions of Dura and of Syria under various spellings. For the title *stator* cf. *Rep.* I, pp. 55–56. I cannot explain the letters πον. of l. 3; it is possible that we have repeated here the date 5ου' found in D. 32 and R. 18, especially since the father's name there is also Salamanes.



D. 25.



μν(ησθη) Θημαρ  
 σᾶς Νιάχ  
 ου Βενεφ  
 ικιάρι(ο)ς  
 τριβούνι

Fig. 7.

Facsimiles of D. 25 and D. 26

Cut in a *tabella ansata* 0.30 m. by 0.195 m. Average height of letters 0.03 m. Lightly cut; there are traces of red paint in the letters.

The name Θημαρσᾶς was met in an inscription in ink from the Gate, published as R. 4. in *Rep.* I, p. 33; and also in a new graffito from the Temple of the Palmyrene Gods (H. 5, above). It is the Semitic *Taimarsou*. The following name has been suggested by Professor Kraeling to be Semitic, embodying the word נִיְחָה—*nijāhā'*—meaning "comfort" or "solace."

D. 26. //ΝΙΠΙΚ//

This is very crudely cut in letters 0.05 m. high. I can suggest no restoration.

D. 27. μν(ησθη) Μόκιμος | 'Ογᾶ στάτωρ | τριβούνι

Cut in a *tabella ansata* 0.385 m. by 0.20 m. The vacant space after the word τριβούνι has been filled with a palm leaf. Average height of letters 0.04 m. There are traces of red paint in the strokes. The name Μόκιμος is common at Palmyra; it was met several times at Dura by Cumont (*Fouilles*, Index) and in the inscription on the little altar published in *Rep.* I, p. 61 f., by Professor Torrey. Professors Torrey and Albright agree that the following name, 'Ογᾶς, is the Palmyrene נִיְחָה, perhaps a hypocoristicon of 'Ογηλος, the Arabic *Ugail*.

D. 28.            μν(ησθῆ) Μαρμ[σ] | στάτωρ

0.34 m. long, 0.08 m. high. Average height of letters 0.035 m. Very poorly cut. For the Semitic name *Mamos* cf. Cumont, *Fouilles*, No. 16.

D. 29.            μν(ησθῆ) ΠΔΩ

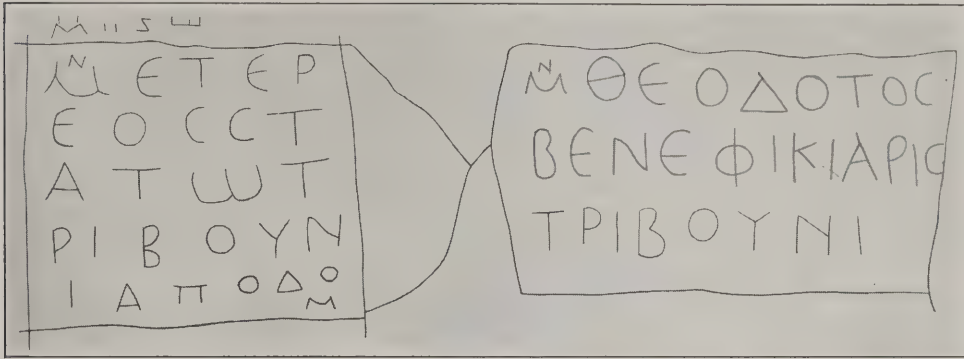


Fig. 8.

Facsimiles of D. 29, D. 30, D. 31

0.15 m. long (?). Average height of letters 0.015 m. Crudely cut. The name Μίδων is suggested for this.

D. 30 (Fig. 8).    μν(ησθῆ) Ἐτερ|έος στ|άτω τ|ριβούν|ι ἀπὸ Δομ(άνας)

The border is 0.28 m. long by 0.23 m. high. The letters average 0.03 m. in height. Crudely cut. There are traces of red paint. The name Ἐτερέος<sup>1</sup> is the Latin *Etereius* or *Hetereius*; cf. Pauly-Wissowa, s.v. It is met in Greek at Halasarna under the form Ἐτερήιος; cf. *I.G.R.R.P.*, IV, 1101. The spelling στάτω for *stator* is probably an accurate index to the local pronunciation. The letters αποδομ have been explained as ἀπόδωμ(α) "offering," but it seems more likely that it is used as a demotic; there are two towns named *Domana*, one in Armenia (Ptol. V, vii, 3) and one in Arabia Felix (Ptol. VI, vii, 33).

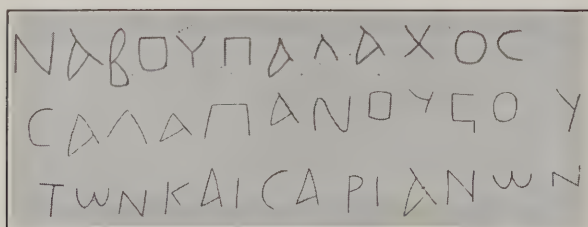
D. 31 (Fig. 8).    μν(ησθῆ) Θεόδοτος | βενεφικιάρι(ο)ς | τριβούνι

Cut in a *tabella ansata* 0.39 m. by 0.20 m. Average height of letters 0.045 m. Crudely but deeply cut. Much paint still remains. As in D. 29 the vacant space at the end is filled by a conventionalized palm leaf.

<sup>1</sup> Professor Torrey, however, calls attention to a Palmyrene proper name, ܡܝܬܐ, found in De Vogüé, 31, line 2, which would seem to correspond exactly to the form *Ετεραιος*; cf. the parallel spellings Σηλαῖος and Σηλέος, in D. 41.

The name Θεόδοτος has already been encountered in Syria, but this is its first appearance at Dura.

D. 32.



Ναβουμάλαχος  
Σαλαμάνου Ξου'  
τῶν καισαριανῶν

Fig. 9.

0.53 m. long, 0.18 m. high. Average height of letters 0.035 m. For the name Naboumalachos Dr. Albright has given me this note:

“Ναβουμαλαχος does not seem to occur so far in Palmyrene, but both elements are common: \**Nabū-malak* (\**בִּרְמַלַּךְ*), ‘Nabu has counseled’; *Nabû-mâlik* is a common Babylonian name.” Cf. also Malakh-Bêl, frequent at Palmyra. *Salamanes* is common at Dura. The date 476 of the Seleucid Era is 164/5 A.D., the date of Lucius Verus’ march down the Euphrates and seizure of Dura-Europos. This date is met elsewhere on the Palmyrene Gate: in R. 18, an inscription by the same individual (cf. below, p. 145), R. 17, and D. 103. For the term *Caesariani* cf. the historical discussion, pp. 159–160.

D. 33.

ΔΑΠΟΝΙΚΟΣ  
ΠΑΠΟΥ ΔΠΤ

Δαμονικὸς  
Μάμου δμτ'

0.88 m. long, 0.19 m. high. Average height of letters 0.08 m. Broad, shallow letters. *Damonikos* is a traditional Greek name; this is, as far as I can learn, its first appearance in Syria. The name Μάμος is met above, D. 28; and compare Cumont, *Fouilles*, No. 16. The date 344 of the Seleucid Era is 32/3 A.D. Cf. the historical discussion, pp. 152 f.

D. 34.

μν(ησθῆ) Μάλχο[s - -]  
- ίδης στάτωρ

0.26 m. long, 0.08 m. high. Average height of letters 0.02 m. The letter forms closely resemble those of D. 24. This is the first appearance of a



patronymic in -ίδης at Dura. The name Μάλχος occurs frequently at Dura and throughout the Semitic world in various spellings, Μάλεχος, Μάλιχος (cf. D. 35), and -μάλαχος as in D. 32.

D. 35.

ΙΓΓΑΙΟC  
ΜΑΛΙΧΟΥ

Ἰγγαῖος  
Μαλίχου

0.38 m. long, 0.12 m. high. Average height of letters 0.045 m. Large, deep letters, with red paint well preserved. For the name Iggaïos I reproduce Dr. Albright's note:

"Ἰγγαῖος is doubtless a variant of Ἀγγαῖος (אגאי), *Haggai* (also pronounced *Higgai*, or the like); cf. *Eph.* II, 16." The name Ἀγγαῖος was found by Cumont, *Fouilles*, No. 27. Malichos is mentioned in the previous inscription, D. 34.

D. 36.

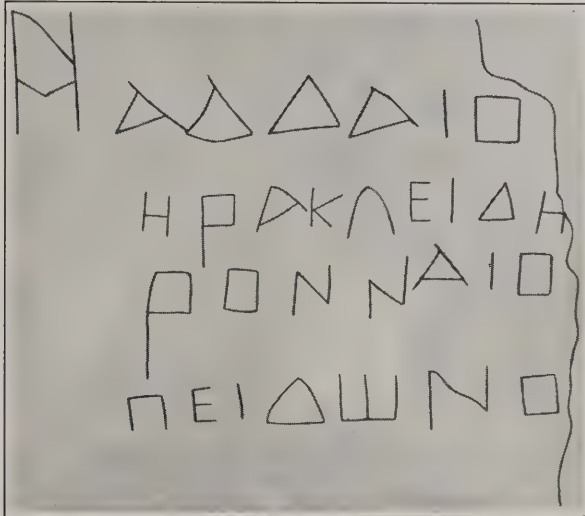
ΓΟΡΑC

Γόρας

0.32 m. long. Average height of letters 0.06 m.

The name is known at Dura; cf. Cumont, *Fouilles*, Nos. 50, 121a.

D. 37.



μν(ησθη) Ἀδδαῖο[ς καὶ]  
Ἡρακλείδη[ς]  
Ῥονναῖο[υ τοῦ]  
Μεῖδωνο[ς]

Fig. 10.

0.28 m. long, 0.22 m. high. Average height of letters 0.025 m. It is

possible to restore this inscription also as the three sons of Meidon. Μν(ησθη) Ἀδδαῖ[ς] | Ἡρακλείδῃ[ς] | Πονναῖο[ς] | Μείδωνος. The names Herakleides and Meidon (or Midon) are common at Dura. Addaios (or Adaios) is not only a well-known Macedonian name, encountered in Syria and Egypt, but also the Greek form of a familiar Semitic name Haddai.

Ronnaios is difficult. If the Addaios of this inscription and of D. 98 (Πονναῖος Ἀδδαίου) be taken as evidence of a Macedonian tradition in the family, it may be itself Macedonian; but there is no proof that Addaios is not Semitic. Other suggestions: Professor Gray would derive it from a place-name, Πῶν πόλις τῆς Γανδαρικῆς Σκυθίας (Steph. Byzant.; Pauly-Wissowa, *s.v.* Πῶν); or even ar-Run in the province of Istahr (Schwarz, *Iran im Mittelalter nach den arabischen Geographen*, p. 28). Professor Kraeling suggests that it is "a Semitic name embodying the Semitic רִנִּי, *ron* = 'joy.' Baethgen on the basis of the LXX postulates רִנִּי, *rōnnī*, 'my joy' as the reading of B. 32, 7. The form Πονναῖος is probably based upon רִנִּי with the caritative suffix, whence רִנִּי or *ronnai*."

Professor Albright proposes to emend the reading to Πονναιος as a perfect transcription of the Palmyrene בְּנִי, בִּוּנָא; but the reading is clear in both occurrences of the name.

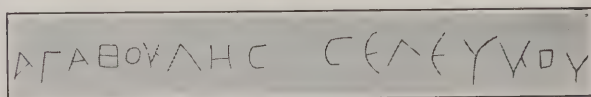
D. 38.

P A C  
ΟΒΗΛΟC

- ρασ -  
οβηλος

The letters, averaging 0.03 m. high, are very faintly cut.

D. 39.



Ἀγαθοκλῆς Σελεύκου

Fig. 11.

0.58 m. long. Average height of letters 0.03 m. Graffito. The curious shape of the *kappa* has already been encountered at Dura; Cumont, *Fouilles*, Nos. 119 and 121.

The name Agathokles here appears for the first time at Dura. It is also found below, D. 105. Seleucus is ubiquitous at the city.

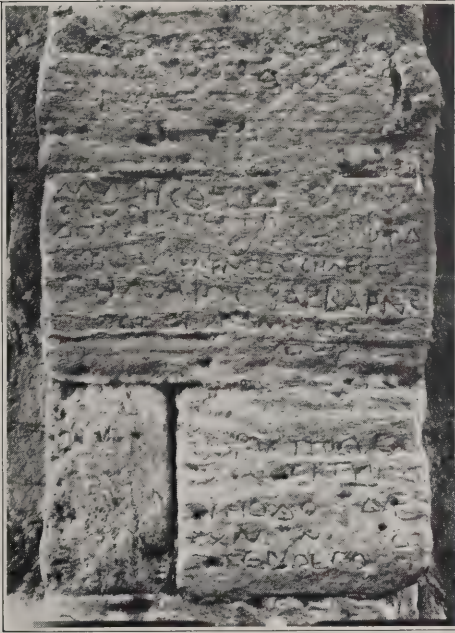


Fig. 12.

Inscriptions D. 40, D. 41, D. 42

D. 40. Ἡμνησθη Ὀβαῖος Θεοζανδάου

0.72 m. long, 0.09 m. high. Average height of letters 0.04 m. This inscription appears in the photograph, Fig. 12. Professor Albright has given me a note on the name Obaios:

“Ὀβαῖος, I would identify with Palm. **עבא**, ‘*Obê*, ‘*Obai*. Lidzbarski, *Eph.* II, 339, is hardly correct in identifying the name with Arab. ‘*Abbaiyu*.”

For Θεοζανδάας Professor Gray has suggested:

“Θεο- would be Baga in O.Pers., Yazdan in Mid. Pers.; could the first part be Θεοζαν-δα-ας (Av. *dā*, ‘knowing’) (cf. J. pp. 146, 490), or may one compare Yazdāndaš(ā), ‘God-Instructed’? (*ibid.*, p. 146). There is a Bagadāna (**בגדאנא**) on an Aramaic bowl, which I once explained (J.A.O.S. xxxiii [1913], 285) as ‘god-knowing.’ A Zand (**זנדר**) is mentioned as daughter of אריה (Montgomery, *Aramaic Incantation Texts*, xix, 17; xxxiv, 8 (not in J)).”



D. 41. The inscription covers a block which measures 0.80 m. by 0.41 m. The height of the letters varies from 0.015 m. to 0.05 m. The letters are very crude and irregularly cut. The effect of blown sand on the surface of the stone is well shown in the photograph, Fig. 12.

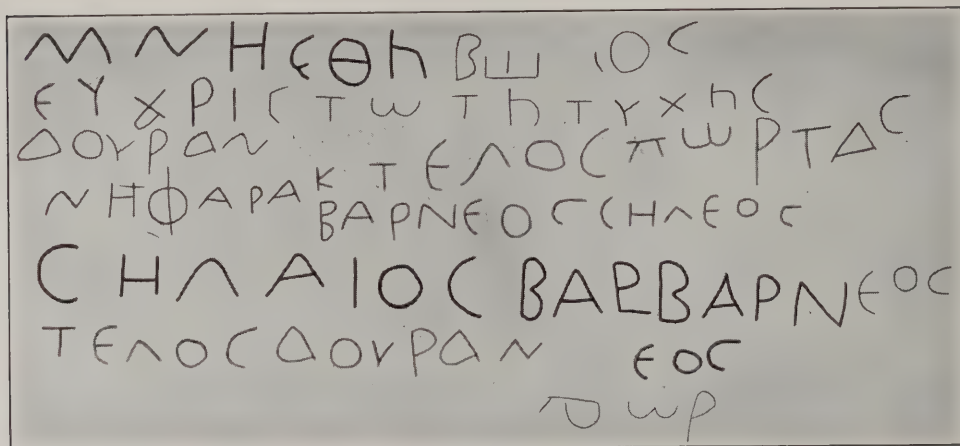


Fig. 13.

μνησθῆ Βω.ος///  
 Εὐχαριστῶ τῇ τύχῃ (sic)  
 Δούραν (sic)  
 Νηφαρακ τέλος πώρτας  
 5 Βαρνέος Σηλέος  
 Σηλαῖος Βαρβαρνεος  
 [εος]  
 τέλος Δούραν (sic)  
 πώρ[τας]

For the expression εὐχαριστῶ τῇ τύχῃ compare Preisigke, *Sammelbuch*, No. 4072; Ἀπολλώνιος Ἰσιδώρου εὐχαριστῶ τῇ τύχῃ τῶν ᾧδε, and also C. 3 in *Rep.* I, p. 41.

Professor Gray has explained the word Νηφαρακ as follows:

"It would appear that something like the not infrequent ἀγαθὴ τύχη or ἀγαθὴ τύχη of Greek inscriptions is implied. Let me propose, then, a Middle Persian \**nēfar(r)ak* 'fair glory.' For the first component cf. Syriac (from Middle Persian) ܢܗܪܡܝܕ (Nēhōrmizd; J, p. 228), Nēšāpūr beside Nēv-š(a)hpuhr (Hübschmann, *Armenische Grammatik*, I, Strasbourg, 1897, p. 21), Persian Nēkrōz, Armenian (from

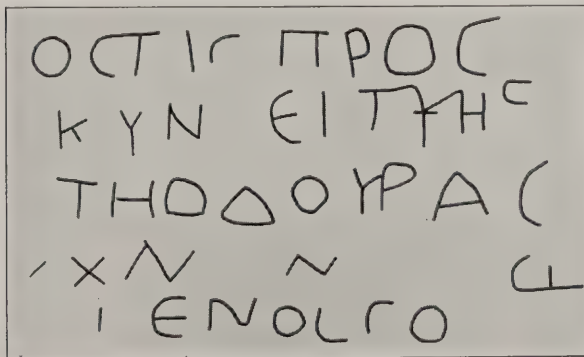
Middle Persian) Νεμάνης, Ναιμάνης (J. p. 228); for the second, the material given by J, pp. 90, 493, and Hübschmann, pp. 43, 89–90, 254, and *Persische Studien*, Strasbourg, 1895, pp. 83, 187, 259; and for the whole, the Middle Persian name Nekūfarnāe (J, p. 228) ‘Possessing Good Glory.’

“The more usual forms of the first component are Middle Persian *nēw* ‘brave, heroic,’ *nēk* ‘good, beautiful’ < \**nē(wa)ka-* < \**nēbaka-* < Old Persian *naiba-* ‘beautiful,’ Old Irish *nóib* ‘holy’ < Indo-European \**noi-bho-* (for the group cf. Lidén, *Studien zur altindischen und vergleichenden Sprachgeschichte*, Upsala, 1897, pp. 59–60), *nē-* itself apparently < Iranian \**naī-a-* < Indo-European \**noi-o-*. The termination *-ak* is very common in Middle and New Persian without essential modification of the basal meaning. For Far(r) as a deity see my *Foundations of the Iranian Religions*, Bombay, 1929, pp. 120–123.

“A general Latin parallel to my suggested explanation of NHΦA-PAK would be ‘quod bonum faustum felix fortunatumque esset’ (Cicero, *De Divinatione*, I, 102).”

πῶρτα is, of course, the Latin *porta* Grecized, stamping this inscription as Roman in date, *i.e.*, after 165 A.D. The matter of customs duties is taken up in the historical discussion, below, pp. 156 f. The names Barnaios and Selaïos are discussed above under D. 3. Cf. also D. 100, and D. 66 and D. 67. Barbarneos means “son of Barnaios,” Barnaios itself being already a patronymic.

D. 42. This inscription covers a block which measures 0.51 m. by 0.42 m. The average height of the letters is 0.03 m.



“Οστις προσ  
κυνεῖ Τύχης (sic)  
τῆς Δούρας  
/ΧΝ . . Ν . . . ψ  
. Ι . ΕΝΟΛΓΟ . . .

Fig. 14.

It is extremely unfortunate that this text is fragmentary. Certain deductions as to its import are drawn in the historical discussion, below, p. 159.

D. 43. 0.42 m. long, 0.35 m. high. Average height of letters 0.06 m.

Μαρροῦς  
Ζηδαίος[υ]  
τοῦ Μαρρ-  
οῦ

These two new names seem to be transliterated Semitic names.

On *Marrous* Professor Torrey has given me the following note:

"*Μαρροῦς* is *not* מַרְרָא, מְרִיָּא, 'master,' but may be related to it. The abstract noun (Aramaic) מְרִיָּא means 'virility,' 'lordship,' etc., and might well be used as a man's name. The Greek transliteration would be *Μαρροῦς*."

Professor Kraeling's suggestion is: "I am quite sure that this has nothing to do with מְרִי, *marī*, 'my lord.' There is a plant מְרִי, *marū*; this might serve as the basis of the name. There is also a Mesopotamian spirit or deity מְרִיץ."

For the name *Zēdaios* Professor Torrey suggests the root meaning "increase." To Dr. Albright "*Ζηδαίος* appears to be the caritative of Nabataean (Arab.) *Zedallahu* (*Zaidallah*), written זִידַלְלוּ. The Semitic transcription of *Zēdaios* would be זִידִי." Dr. Kraeling proposes to revise the reading to זִלְי, *Zillaī*, as seen in Dalman, *Aramäisches Wörterbuch*, s.v. The reading, however, as it appears again in D. 70, seems to be correct.

D. 44.                      ΑΠΠΩΝΙΟC                      Ἀμμώνιος

1.09 m. long. Very large, shallow letters, 0.10 m. high. Earliest period. The name is well known at Dura.

D. 45. 0.48 m. long, 0.23 m. high. Average height of letters 0.05 m.

ΑΠΟΛΛΩΝΙΟC                      Ἀπολλώνιος  
ΑΠΟΛΛΩΝΙΟΥ                      Ἀπολλωνίου  
ΕΥΡΩΠΑΙΟC                      Εὐρωπαϊός

Together with two texts in the Tower of the Palmyrene Gods, published by Dr. Hopkins (above, H. 46 and H. 47), this is the first epigraphical appearance of the Greek name of the city, *Europos*. Cf. the historical



discussion, below, p. 156. An Apollonios, son of Apollonios, who cut D. 56 is probably the same individual.

D. 46.           ΞC□ΥΛΥ/////Λ/////ΑΘ

Average height of letters 0.09 m.

D. 47.           ΔΙ□ΔΨΡ□C                           Διόδωρος

0.45 m. long. Average height of letters 0.035 m.

D. 48.           μν(ησθῆ) 'Αντί(ο)χ[ος]

0.10 m. long. Height of letters 0.015 m. Very lightly cut.

The name is common at Dura. For the omission of *omicron* cf. D. 115.

D. 49.           ΠΑ | ΔΑ | ΧΔ | | Α□Θ////

Average height of letters 0.03 m.

D. 50.           ΗΛΙ□ΔΨΡ□C                           'Ηλιόδωρος

0.53 m. long. Average height of letters 0.04 m.

D. 51.           ΝΙΙΚ□ΛΑ□C                           Νι[ι]κόλαος

0.55 m. long. Height of letters 0.045 m. The second *iota* is the stroke originally intended for *kappa*, but cut too close to a crack.

The name was not found by Cumont, but appears again in D. 95.

D. 52.           ΑΥCΙΑΠΙΞΕΝ□C                           (a) Λυσία[ς]  
(b) [Ε]πίξενος(?)

Average height of letters 0.07 m. Apparently a later inscription has been superimposed upon an earlier.

D. 53.           ΝΔΔΧΧΑΔ . < . Α > □ <

0.62 m. long (?). Average height of letters 0.035 m.

D. 54.           ΒΑΡ//ΑΤΗC                           Βαρ[Υ]άτης

0.68 m. long. Average height of letters 0.07 m. This Semitic name is established as common at Dura.

D. 55.           Δ . Ξ   Δ . Ξ  
/ Ρ   α . ρ  
ΑΡΧΕΙ   'Αρχε[ -- ]

0.11 m. high. Average height of letters 0.025 m.

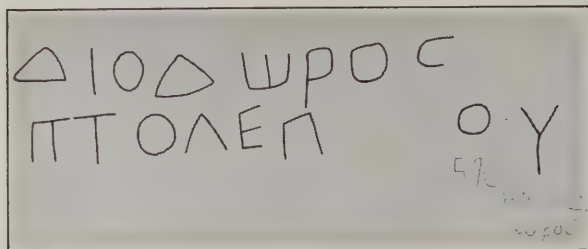


0.70 m. long, 0.20 m. high. Average height of letters 0.07 m. Large shallow letters; the stone is badly damaged by weather and the heat



from the altar beneath it. The same individual appears in D. 43, where the names receive discussion.

D. 71.



Διόδωρος Πτολεμ[αί]ου

Fig. 15.

Facsimiles of D. 71 and D. 72

0.70 m. long, 0.15 m. high. Average height of letters 0.05 m. Earliest period; the letters are of the typical large, shallow character. Diodoros is ubiquitous at Dura; the name Ptolemaios appears twice in Cumont.

D. 72 (Fig. 15). ΕΓΓ' | 'Ηλιόδωρος

0.19 m. long, 0.11 m. high. Average height of letters 0.025 m.

The date 296 of the Seleucid Era is 17/16 B.C. The position of this inscription with relation to the altar underneath it (on which is inscription D. 74) shows that the altar is earlier. Doubt had been cast on the date ΠΟΘ (D. 74) on this altar because of its apparent lateness of style.

D. 73.

Λ/ΙΟΙΧ /  
 \ΕΧΧΒΟΥ

1. 2. - λεσάβου (?)

These are very small letters, less than 1 cm. high, scratched in the plaster surface of the altar.

D. 74.

Π'ΟΘ

Average height of letters 0.06 m. It is cut in the plaster surface of the altar mentioned above, under D. 72. The year 170 of the Seleucid Era is 134/133 B.C. The order of the numbers, unusual at Dura, is common enough on papyri and other Hellenistic documents.

D. 75.

Δ////ΔΠ////

Δ[ιό]δω[ρος]

Average height of letters 0.05 m.

D. 76. ΗΡΑΚ/// 'Ηρακ[λείδης ?]

Average height of letters 0.05 m.

D. 77. ΑΡΤΕΠΙΔ 'Αρτεμίδ[ωρ]|ος (?)  
ΟC

0.36 m. long. Average height of letters 0.055 m. Very shallow letters, painted black.

D. 78. Βαρχάλβας

0.41 m. long. Average height of letters 0.08 m.

The red paint of these letters is well preserved. Professors Torrey and Albright agree that this name is the Aramaic בִּרְכַּלְבָּא, *Barkalba*, lit. "son of Kalba" ("the dog").

D. 79. ΑΠΠΩΝΙΟCΑΠΟΛΛΩΝΙΟΥ  
ΩΝΙΟΥΤΟΥΑΘΗΝΟΔΩΡΟΥ  
'Αμμώνιος 'Απολλ|ωνίου τοῦ 'Αθηνοδώρου 97'

1.39 m. long, 0.20 m. high. Letters 0.06 to 0.09 m. in height. The names are very common at Dura. The date 390 of the Seleucid Era is 78/9 A.D. For the importance of this in connection with the paleography of these inscriptions cf. the historical discussion, below, pp. 152 f.

D. 80. ΔΑΔΙΛΙΤΗΙ Δαδιλίτης  
ΒΑΡΧΑΛΒΟΥ Βαρχάλβου

0.65 m. long, 0.22 m. high. Average height of letters 0.08 m. Professor Gray suggests a place-name origin for *Dadilites*, quoting *Δαδαλείς*, in Maeonia, between Mysia, Lydia, and Phrygia (Ptol. V, ii, 21), and the Persian *Δαδίκαι*. For Iranian names beginning with *Dad-* Dr. Gray refers to Justi, *Iranisches Namenbuch*, pp. 75–76; but he doubts that this is Iranian. Professor Torrey suggests בִּרְכַּלְבָּא or בִּרְכַּלְבָּא, similar to בִּרְכַּלְבָּא in 2 Chron. 20, 37; cf. Gray, *Studies in Hebrew Proper Names*, p. 62. The reading, however, is very uncertain. The name Barchalbas is discussed in the previous note.

D. 81. ΒΑΡΓΙΝΑΙΟC Βαργιναίος  
ΒΑΡΧΑΛΒΟΥ Βαρχάλβου

0.49 m. long, 0.14 m. high. Average height of letters 0.06 m. Professor Albright connects the name *Βαργιναίος* with 'Αβιγγιναίος, "Servant of Ginai," found by Cumont, who correctly identified Ginai with Gennai

(Γενναῖος, Γενεᾶς), an identification first given by Lidzbarski in *Nachrichten v. d. Ges. d. Wiss. zu Göttingen*, 1923, p. 103. Dr. Kraeling's note is: "Surely a Greek form of a Semitic name בֶּר עֲנָיָה, bar<sup>a</sup>nājāh = 'Son of 'Anajah.' For <sup>a</sup>nājāh as a Hebrew proper name cf. Lidzbarski, *Ephemeris*, II, pp. 196 f. For *gamma* as the Greek rendition of ע = ' cf. note on Γωσαῖος, in D. 103." Professor Torrey refers to נִיָּא (pronunciation uncertain) on a Palmyrene tessera published in Lidzbarski's *Ephemeris*, III, p. 156.

D. 82. Ἀκαταῖος

0.46 m. long. Average height of letters 0.06 m.

This is for Ἐκαταῖος. For Macedonian interchange of *epsilon* and *alpha* cf. Arrhidaios and Errhidaios in Otto Hoffmann, *Die Makedonen*, s.v. This is the first appearance of the name in either form at Dura; Suidas quotes the name Ἀκαταῖος as the name of a famous horse. Professor Torrey, however, suggests that it may be a hypocoristicon from עֲקֵב־עָתֶה, 'Aqab'atē, "Atē has recompensed."

D. 83. Ἀβαβούσιος

0.61 m. long. Average height of letters 0.08 m.

According to Dr. Albright, "Ἀβαβούσιος, is rather peculiar, but presumably stands for a Nabataean \**Hababū* parallel to *Habîbū* (הַבִּיבּוּ)."

D. 84. ΑΠ

This is a graffito cut in letters 0.07 m. high over the first two letters of the preceding inscription.

D. 85. Λυσίμαχος Λυσίου

0.72 m. long. Average height of letters 0.04 m.

This man is undoubtedly the same individual as the Lysimachus son of Lysias of Cumont, *Fouilles*, No. 92 (cf. below, p. 170 for the correction of the reading). These are the only two occurrences of the name Lysimachus at Dura; Lysias is common.

D. 86. Σεριμξαχος

Professor Torrey's note: "The Semitic root *ṣ r m* has the meaning 'bold, audacious.' The abstract noun *serimū*(tha) means 'boldness.' This suggests that our name was *Serīm-zakhē*, '(the) bold conquers.' "



D. 87. ΑΠΟΛΛΩΝΙΟC 'Απολλώνιος

0.78 m. long. Average height of letters 0.07 m.

D. 88. ΗΡΑΚΛΕΩΝ 'Ηρακλέων  
ΔΙΟΔΩΡΟΥ Διοδώρου

0.55 m. long, 0.17 m. high. Average height of letters 0.065 m. Hera-  
kleon appears also in D. 23. Diodoros is very common.

D. 89. ΔΙΟΔΩΡΟC Διόδωρος

Average height of letters 0.045 m.

D. 90. ////////// OC NIKANOPOC [- ]ος Νικάνορος

The name of Nikanor, echoing the traditional founder of the city, has  
already been found by Cumont. Cf. "Ολυμπος Νικάνορος in the following  
inscription.

D. 91. 'Αρτεμίδωρος Γονδάζου  
καὶ "Ολυμπος Νικάνορος  
l. 1. Or ". . . . Γονδάζου."

0.44 m. long, 0.07 m. high. Average height of letters 0.02 m. Graffito.

Professor Gray's note: "Γονδαξης may stand for an Iranian \**Vin-*  
*dāxša*—'Possessing a Gain-Chariot'; for Γονδ- cf. Γονδοφάρου, Γονδαφά-  
ρου, Γονδοφέρρου for O. Pers. *Vi(n)da(h)farnah-*, Avesta *vindi-x<sup>v</sup>arə-*  
*nah-*, 'glory-gaining' (Justi, p. 369; Bartholomae, coll. 1442, 1449),  
and for *-axša-* see Justi, pp. 71, 25, 484." The other names are well  
known at Dura.

D. 92. Κάλλιστρο[s]

0.22 m. long; height of letters 0.04 m. Kallistratos is an alternative  
restoration.

D. 93. ΘΕΟΔΩΡΟC Θεόδωρος  
///ΣΑΠCΟΥ ΤΟΥ [Λι]σάμσου του  
ΑΣΠΑΟΥ 'Ασμάου (?)

The name *Lišamš*, according to Professor Albright, is the excessively  
common Palmyrene (Arabic) ܠܝܫܡܫ, Λίσασμος, found also in H. 8,

above. The third name may also be read 'Ασόδου. If this be corrected to 'Ασάδου, as Dr. Albright suggests, it is the common Arabic 'Asad, "Lion," often found in transcription as "Ασαδος.

D. 94.                    ΗΛΙΟΔΩΡΟΣ                    'Ηλιόδωρος

1.35 m. long. Large, shallow letters, 0.10 m. high.

D. 95.                    ΝΙΚΟΛΑΟΣ ΒΑΡΛΑΟΥ                    Νικόλαος Βαρλάου

1.02 m. long. Average height of letters 0.085 m.

Nikolaos appears in D. 51. Barlaas was found by Cumont, and appears again below, in D. 128.

D. 96.                    ΣΕΜΙΣΑΚΒ[ΟΣ]

0.45 m. long. Average height of letters 0.05 m. "Σεμισακβ[ος], is unquestionably equivalent to Aramaic (Palmyrene) \*Šemiš 'aqab (\*Šamaš-'aqab), both elements of which (ܫܡܝܫ-ܐܩܒ) occur constantly in proper names."—W.F.A.

D. 97.                    //////////                    [- -]  
ΔΑΝΥΠΟΥ                    Δανύμου

Average height of letters 0.05 m. The reading is not certain; ΕΑΛΛΑΠΑΝΟΥ is also possible.

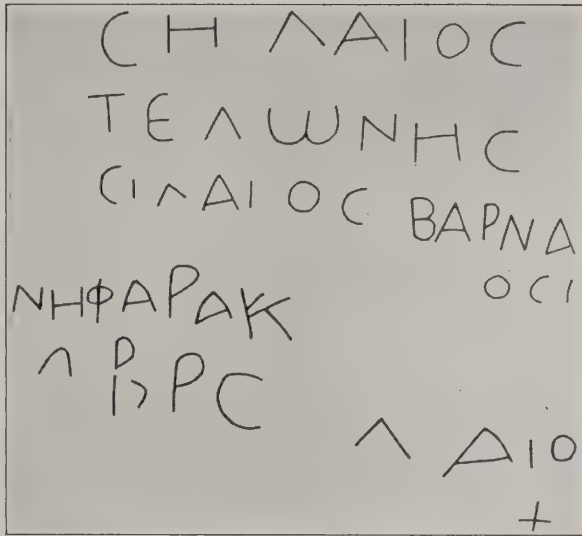
D. 98.                    ΠΟΝΝΑΪΟΣ 'ΑΔΔΑΪΟΥ

0.61 m. long. Average height of letters 0.03 m. For the names see the discussion under D. 37.

D. 99.                    'ΗΡΑΚΛΙΔΗΣ

0.37 m. long. Average height of letters 0.045 m. Graffito. The name also appears in D. 11.

D. 100.



Σηλαῖος | τελώνης  
Σηλαῖος Βαρνά|οσι (sic)  
Νηφαρακ  
λβρος [Ση]λαῖο[ς]

Fig. 16.

The stone on which this is cut measures 0.40 m. high by 0.35 m. wide. Average height of letters 0.025 m.

Cf. D. 3, D. 41, D. 66, D. 67, and the historical discussion, below, p. 156.

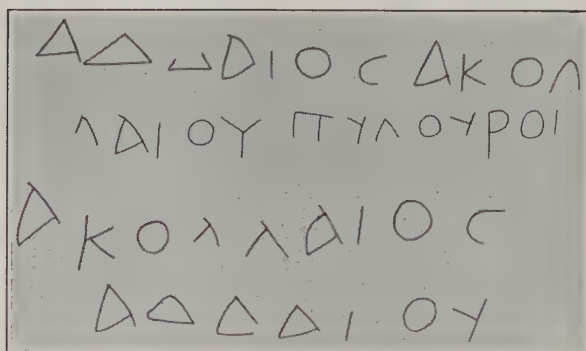
For the letters λβρος Professor Gray suggests an abbreviation, in Greek letters, of Syriac l(ə)B(a)r(Nā)š(ā) (ܠܒܪܐܝܬܐ) "for (or of, belonging to) Bar Nāšā" (Βαρναῖος, etc.).

D. 101. . . . ΔΗΠΑ□  
. ΙΗΕΔ□

Very large, vague letters.



D. 102.



'Αδδαῖος 'Ακολ-  
λαίου πυλouroί  
'Ακολλαῖος  
'Αδδαίου

Fig. 17.

0.44 m. long, 0.25 m. high. Average height of letters 0.025 m. For 'Αδδαῖος cf. D. 37. The name also appears in D. 98 and D. 117, of the inscriptions at the Palmyrene Gate. 'Ακολλαῖος may be Macedonian; but Professor Gray suggests 'Ακολα, a city on the south shore of the Caspian (Ptol. VI, ii, 2), as the place-name origin of this. For πυλouroί cf. the following inscription and the historical discussion, below, pp. 156, 158. Reproduced in photograph, Fig. 18.

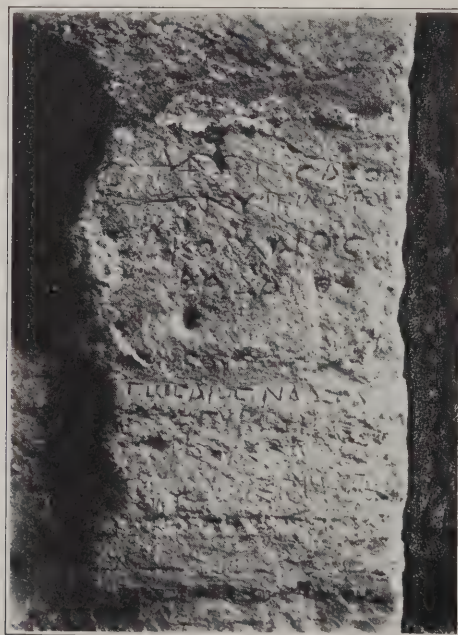
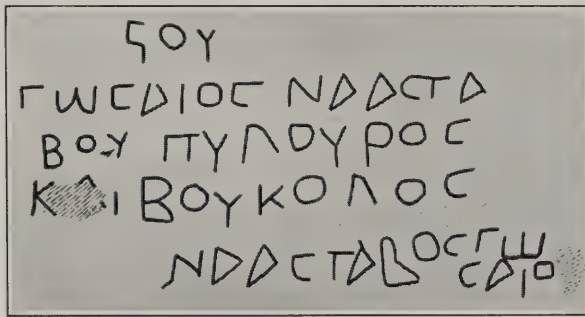


Fig. 18.

Inscriptions D. 102 and D. 103

D. 103.



Γου'  
Γωσαῖος Νααστά-  
βου πυλουργός  
καὶ βουκόλος-  
Νάασταβος Γω-  
σαίο[υ]

Fig. 19.

0.47 m. long, 0.25 m. high. Average height of letters 0.03 m. shown on photograph, Fig. 18.

The date 476 of the Seleucid Era is 164/5 A.D. Other inscriptions of the same date are R. 17 and R. 18 (in *Rep.* I) and D. 34. These names are thus explained by Professor Kraeling:

"Ναασταβος.—Greek form of Semitic name not otherwise found but clear in itself, as representing נֶחָשׁ תֹּב—nēḥaš-tōb and signifying—'good omen.' For 'omen' as meaning of nēḥaš cf. Brockelman, *Lexicon Syriacum*, 2 ed., s.v. For Ναας- as transcription of nēḥaš cf. the Gnostic Ναασῆνοι. For combination nēḥaš-tōb cf. the Jewish name Yōm-tōb.

"Γωσαιος.—Greek form of common Semitic name. Cf. Hebrew: עֶזְרָא—'ūzzāh *I Chron.* 6, 14, and Aramaic: עֶזְרָא—'ūz'ai. Lidzbarski, *Eph.* II, 16, 14. For the transition from ע = ' to Greek Γ cf. the Greek rendition of עֶזְרָא = 'azzāh namely Γάζα. For the weakening of ע = z in the direction of σ cf. Lidzbarski, *Handbuch der nord-semitischen Epigraphik*, Vol. I, 1898, p. 392." Professor Gray suggests an Iranian origin for this name: Γωσαιος, perhaps < \*gao-saya-, "cat-tle-place," Skt. \*go-ksaya-; cf. Γώσακος, "Bull-Strength," Γωσ'θρης, "With the Seed of the Bull" (J., pp. 118, 509, 110).

The titles πυλουργός and βουκόλος<sup>1</sup> are discussed below, pp. 156, 158 f.

D. 104.      ΒΑΔΡCΟ//// ΑΨΟΡC

Small, faint letters.

<sup>1</sup> Mr. Rowell, a member of the 1929–30 staff of the expedition, has confirmed this reading from the stone.

D. 105. //ΓΑΒ□ΚΛΗC [ 'A ] γαθοκλῆς

0.46 m. long. Average height of letters 0.05 m. This name also appears in D. 39.

D. 106. //NOC//

Graffito.

D. 107. ANTΩNI□C 'Αντώνιος

Clearly cut. 0.22 m. long. Average height of letters 0.025 m. This is the first appearance of this Latin name at Dura.

D. 108. ANΔPO 'Ανδρο[κλῆς?]

Average height of letters 0.055 m. The reading is extremely doubtful.

D. 109. / / / / □C CEΛEY [-]ος Σελεύ  
KOY KOU

Average height of letters 0.05 m.

D. 110. 'Ηλιόδωρος

0.64 m. long. Average height of letters 0.07 m.

D. 111. Κόνων | 'Ακρίσιου

0.27 m. long, 0.11 m. high. Average height of letters 0.03 m. Κόνων is a common name at Dura, but this is the first appearance of the early Greek 'Ακρίσιος.

D. 112. CΘ!Λ///

Large, shallow letters.

D. 113. APTEΠΙΔΩP□C 'Αρτεμίδωρος

0.90 m. long. Average height of letters 0.07 m. Extremely shallow. Across the top of this is a Safaitic inscription (S. 7, p. 177).

D. 114. ANTI□X□C 'Αντίοχος  
ΔΗΠΗΤΡΙ□Υ Δημητρίου

0.47 m. long, 0.13 m. high. Average height of letters 0.055 m. The names are familiar at Dura.





D. 123. Διόδοτος Λυσίου τοῦ Ἀλεξάνδρου  
0.48 m. long, 0.07 m. high. Average height of letters 0.035 m. The names are all familiar at Dura.

D. 124. ΔΙΟΚΛΗC A Διοκλῆς A  
0.50 m. long. Average height of letters 0.055 m. The name is familiar at Dura.

D. 125. //XN//// - ΧΝ -  
//PAKΛI//// [Ἡ]ρακλεῖ [ίδους?]  
0.19 m. high. Average height of letters 0.065 m.

D. 126. ΔΙΟΔΟΤΟC Γ Διόδοτος Γ  
0.42 m. long. Average height of letters 0.04 m.

D. 127. CΕΛ Σέλ[ευκος]  
ΠΑ Πα-  
ΚΡ Κρ-

Average height of letters 0.07 m.

D. 128. Ἡρόδοτος Β  
Βαρλάου  
τοῦ //////////////

0.62 m. long, 0.30 m. high. Average height of letters 0.09 m. The name of the grandfather in line three cannot be read as Ἡροδότου.

D. 129. ANTIOXO C Ἀντίοχο[ς]  
C OΛ Σ[. . . .]ολ[- -]


0.60 m. long. Average height of letters 0.08 m.

D. 130. ΔΗΠΗΤΡΙ Δημήτρι  
OC ος

Average height of letters 0.07 m.

D. 131. ΓONAIOC Γοργαῖος

0.40 m. long. Average height of letters 0.06 m.

The reading is very doubtful. Professor Kraeling explains this word as the Semitic  = 'ārnaia', the "courageous" or "persevering." "For the change from ʾ = ' to Γ cf. note on Γωσαῖος (D. 103)."

Professor Gray suggests an Iranian origin: "Γορναιος; cf. the Iranian region-name Varena- (for this Avesta word see Bartholomae, *Altiranisches Wörterbuch*, coll. 1371-2, and for the phonology involved see above on Γονδαξης)." .

### 3. Other Inscriptions from the Palmyrene Gate.

D. 132. On the west wall of the north tower, facing the desert, is an inscription in large, shallow letters, 0.09 m. high:

ΙΕΡ// Ι ///

Ἱερ[α]ἱ[ος]

Professors Albright and Torrey agree that this is the Palmyrene ירר, *Yarḥai*. The name is found again in R. 11a, *Rep.* I.

D. 133. On the east wall of the north tower, on the wall facing the city:

ΑΡΤΕΠΙΔ

Ἀρτεμίδ[ωρος]

0.56 m. long. Average height of letters 0.07 m. This was in later times covered by the plaster steps (Pl. XXXVIII, 1).

D. 134. On the right jamb of the doorway into the south tower is a faint graffito: <sup>N</sup> ΜΑΘΩΝ

0.08 m. long. Average height of letters 0.01 m.

D. 135. On the left wall of the passage of this doorway: <sup>N</sup> ΠΣΑΚΒΩΣ  
0.06 m. long. Average height of letters 0.01 m. Graffito.

In the doorway of the north tower are four inscriptions:

D. 136. ΠΑΓΕΙΒΗΛΩΣ Μ

Ἱαγεῖβηλος Μ α[- -]

0.49 m. long. Average height of letters 0.04 m.

D. 137. ΒΗ// Π // Π // Ι ////

Very crude. Average height of letters 0.08 m.

D. 138. ΑΒΙΔΛΑΤΗΣ

Ἀβιδλάτης

0.55 m. long. Average height of letters 0.07 m.

Professor Albright has given me the following note:

"Αβιδλάτης is evidently correct, and represents Arabic 'Abd-lât (عبد-لآة). Cf. Αβιδσημιατος, Cumont, *Fouilles*, p. 382, for 'Abd-sêmia. The name means Servant of the Goddess Lât (Allât)."



D. 139.

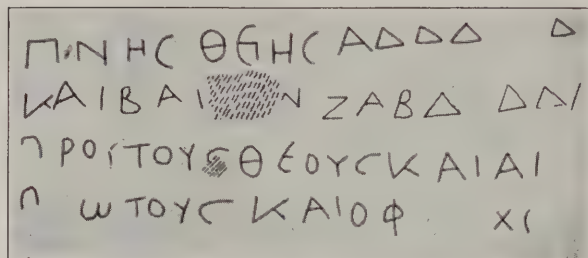


Fig. 20.

The text appears with restorations suggested by Dr. Albright:

Μνησθείης Αδαδ[ακ]α[βος]  
 καὶ Βαρ[. . .]ν Ζαβαδν[άνου]  
 πρὸς τοὺς Θεοὺς καὶ Ἄρ[τέμιδα ?]  
 [. . .]ω τοὺς καὶ Ὁφ[ - - ]χ[ - - ]

"The names *Adad-acab* and *Zabad-Nanai* (cf. זבדננא, Lidzbarski, *Eph.* II, 207), both occur in Aramaic."

For the form μνησθείης cf. Mr. Hopkins' discussion, above, pp. 96 ff.; and also the sherd "μῆμνηται ὁ δεῖνα," see below, pp. 165 ff.

A stone 0.74 m. long by 0.22 m. high, found in the passage of the Gate, bears four inscriptions. As all the stones of the lower courses are preserved *in situ*, this must have fallen from one of the crenellations.

D. 140. σοραιοια

0.47 m. long. Average height of letters 0.06 m.

D. 141. [Σεμισ]ιάβος

0.34 m. long as preserved. Average height of letters 0.05 m. For this name cf. Cumont, *Fouilles*, No. 45.

D. 142. ΝΙΚΩΝ Νίκων

0.25 m. long. Average height of letters 0.05 m. The name is familiar at Dura.

On some fragments of plaster still adhering to this stone are a few letters, 1 cm. high:

εψι  
 παρ

4. *Additional Notes on Inscriptions Previously Published.*

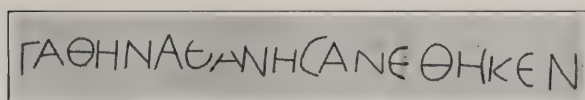
R. 18 can now, thanks to D. 32, be restored as:

σου'  
Να[βουμάλαχ]ος  
Σα[λαμάνου]

This is the individual mentioned in the companion inscription.

The inscriptions on the bas-relief of Herakles.

Occasion is taken to present a revised reading of the Greek inscription, and a new Palmyrene inscription, on the bas-relief of Herakles which was found at the Palmyrene Gate and published in the previous *Rep.* I, p. 47. This bas-relief, published from photographs, is now in the Museum at Yale, and upon examination has been found to be complete on its left side as well as upon its right. Athena was not portrayed beside Herakles on this small monument, as was earlier suggested, and the Greek text is fully preserved:



Γαθηναθάνης ἀνέθηκεν

Fig. 21.

Furthermore, under the missing right arm of the figure there is a Palmyrene version of the same text. Squeezes of this were sent to Professor C. C. Torrey, then absent on leave in Europe, who has supplied this comment:

The inscription is complete, save that the initial character in the first line is obliterated. The customary alignment at the right hand makes it certain that a letter originally stood in the now vacant space; and the sense requires the letter 'ain, for which there is ample room. The characters are well cut, and appear distinctly in the squeeze.

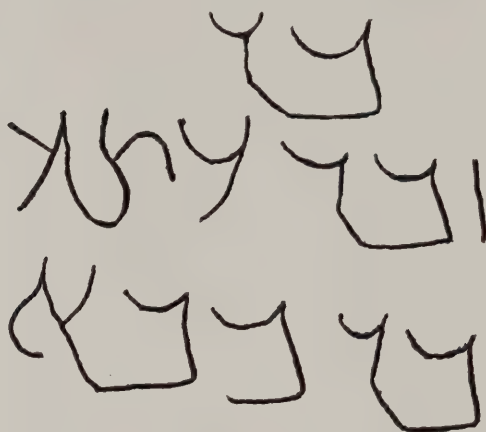


Fig. 22.

(Facsimile)

[עבד|זבדעטה|בר בבא]

Made (and dedicated) by Zabad-‘Athē son of Bābā.

The name Zabad-‘Athē, “‘Athē gave,” is of the very familiar type represented in Biblical Hebrew by Nathanael, Elnathan, and the like. It is noticeable that the Greek text of this bilingual gives Γαθηναθάν(ης), another good Palmyrene name having exactly the same meaning, but containing a different verb. In the Palmyrene-Greek bilinguals generally, each language goes its own way, the two rarely corresponding exactly, and the Greek very often freely adapting or translating the Semitic proper names. Variation of the sort illustrated here is quite unusual, however.

The representation of the Semitic guttural ‘*ain* by Greek *gamma* or Roman *g* is a thing of frequent occurrence in transliterations, from pre-Christian Greek down to mediaeval Spanish; and this not only when the character corresponds, as in the present case, to the Arabic dotted consonant (*ghain*), but occasionally also (contrary to the prevailing opinion) when it is the lighter guttural that is reproduced. An interesting parallel to the present transliteration is to be seen in the Greek Ἀταρ-γατις, in which compound divine name the second element is the ‘Athē (Atē) of our inscription.—C. C. T.

##### 5. *Inscribed Objects Found at the Palmyrene Gate.*

(a) A bronze swastika found in room F of the south tower (Pl. II) of the Gate.

This article, whose character can be readily understood from the illustrations (Pl. L, 2 and 3) is 0.084 m. square and 0.011 m. thick. The



ring on the back is 0.02 m. high, and the arms of the swastika are 0.026 m. wide. The end of the upper right arm is broken away.

A *delta* supplied in the missing fragment gives the reading

[Δ]ούραμ εὐνοῖς (for εὐνοεῖς)

Dura here, of course, is the city personified as Tyche.

The inscription has no close parallel, nor have inscribed swastikas of this nature been previously discovered. The swastika is very common as a *motif* on the stamped pottery of Dura and one appears on the plaster stamp from the Bath (Pl. XXXIX, 2).

The use of *mu* as the accusative ending indicates that this swastika was as Roman as Greek, and probably belonged to the Syro-Roman soldiers of the late occupation. It is noted elsewhere (below, p. 151) that numismatic evidence proves the continued use of this room at least until the time of Philip Senior.

On the back of the swastika (Pl. L, 2) is another inscription in small but deeply-incised letters:

καλοὶ καρποί

The back of each arm is occupied by a rude palm branch, incised.

Even without the evidence of this second inscription, comparison of the swastika with bread stamps of the classical period, in Cairo (cf. Milne, *Catalogue générale des antiquités égyptiennes du Musée du Caire, Greek Inscriptions*, pp. 130–132) and in the British Museum, leaves no doubt that this swastika was intended for marking loaves; even though this shape is not found, the parallel of raised letters, usually giving the baker's name, closely corresponds to the present object of discussion.

There must be some connection between the sanctuary at the Palmyrene Gate and that of the Temple of the Palmyrene Gods. Mills, be it remembered, were found at both places. Sacred bread was used in the sacrifices, as it is used today in the Greek Orthodox church, stamped with similar stamps; and in fact one of the graffiti of the Palmyrene temple, Cumont No. 22, reads ἀρτοκόπω \*μν'. For the unusual symbol here Professor Rostovtzeff prefers to read χ(ρίνικας) instead of χ(ρόνους); as assignment to the baker of the temple of forty-three choenixes of grain. And in another inscription, No. 15, also at the Temple of the Palmyrene Gods, appears a list of sacred utensils in metal, among them

μαζ-, which Cumont restored as μάζ(α). Rather is it likely that a word like μαζ(ονόμος) is to be restored in this place; a sacred tray for the sacrificial bread. A μαζονόμος as a part of the sacred utensils of a temple is attested by P. Oxy., 1449, 58; 60 (III) (return of temple property, 213-17 A.D.): ἐν ἱερῷ μαζονόμ(ος) χα(λκοῦς) α'. The form of a μαζονόμος is illustrated by the tray which a Syrian cake dealer—reproduced in the bronze statuettes recently found at Pompeii—holds in his left raised hand.<sup>1</sup> Bronze stamps similar to that of Dura are frequently found in Syria. I may quote one which may have been used by a keeper of a storehouse for sealing jars (Jalabert et Mouterde, *Inscr. gr. et lat. de la Syrie*, I, 200) with the inscription καλὴ ἀποθήκη (= ἀποθήκη). A Christian stamp in the form of a cross bears the inscription Ἀναστασία which I explain as the stamp of a resurrection church for the sacred bread (προσφοραί).

(b) A Latin inscription on a *tabella ansata*.

On the floor of room H of the north tower of the Palmyrene Gate (Pl. II) was found a wooden *tabella ansata* of remarkable preservation (Fig. 23). It was simply made; notches were cut in the corners of a thin board and small holes, 0.005 m. in diameter, were drilled 0.05 m. from the ends to serve for pegs. The plaque is 0.59 m. long by 0.212 m. wide and 0.0085 m. thick. It is stained a deep red, through which the grain of the wood may be clearly seen. On one face is a Latin inscription of six lines in white paint, which has in places disappeared without leaving a mark on the ground. At the left is a familiar leaf *motif*, and a similar symbol is used instead of dots at the abbreviations.

<sup>1</sup> A. Maiuri in *Boll. d'Arte*, Dec., 1925.



Sept(imium) Lusian Str(ate-  
gum) Dur(ae)  
et Nathim coniugem s(upra)  
s(cripti)  
et Lusanian et Mecannaeae  
et Apollofanen et Thirida-  
ten pueros eorum.  
Ben(eficiarii) et dec(uriones)  
coh(ortis).

Fig. 23.

Tabella ansata



The ancestors of this family have previously appeared as prominent at Dura; cf. Cumont, *Fouilles, Μηκανναία*, Inscr. 74, *Μηκανναία Λυσίου*, Inscr. 75, etc.; *Λυσάνιας* and *Ἀπολλοφάνης* are also traditional family names. Cumont's No. 75, dated in 107/8 A.D., must commemorate a period three or four generations earlier in the family.

Septimius must have taken his name from Septimius Severus, which bears upon the dating of the inscription. Mecannaea seems certainly to be a feminine name, a daughter of Septimius, and no doubt his children are listed in the order of their ages. Thiridates is a well-known Iranian name, borne by a Parthian king of the time of Tiberius, at least two Armenian kings, of whom Tiridates I was a contemporary of Nero, and a number of Persian and Parthian officials of high rank.<sup>1</sup> The spelling encountered in the present instance according to Professor Gray, suggests the Vulgar Latin *th* for *t* as in *Arthemio*, *thurarius*, *Euthychi*, *Tholomeo* (!). Cf. Diehl, *Vulgärlateinische Inschriften*, Bonn, 1910, Nos. 10, 795, 902, 1131.

Comparison with the closely similar *tabella ansata* painted into one of the frescoes of the Temple of the Palmyrene Gods (Cumont, Inscr. No. 6) leads to the suggestion that this plaque was affixed to the frescoes of which scanty traces remain above the doorway into the south tower of the Palmyrene Gate. At some moment it fell, jarred from its place by an earthquake or loosened by weathering, and was deposited in the less frequented north tower, where we found it. This inscription and the fresco to which it was attached must be compared with the fresco of the Roman Tribune of the Temple of the Palmyrene Gods. They are closely connected in date; one commemorates the *strategos* or civil governor of Dura, the other the tribune or military chief of the post. It is important to note that the lack of special designation of the cohort indicates that at that time there was only one cohort stationed at Dura. The identity of this cohort cannot be determined until the tablet is more exactly dated. The name Septimius is evidence only that it was after Septimius Severus came to the throne; Septimius Lysias need not have received this name at birth, but might have adopted it at any age. But the presence of an inscription dated in 208/9 A.D. (*Rep.* I, R. 11, p. 37) cut in the walls of the inner court of the passage of the Palmyrene Gate, is proof that these walls were not plastered over until after 209; and indeed the

<sup>1</sup> Cf. Pape, *Wörterbuch der griechischen Eigennamen*, s.v. Τηριδάτης, Τηριδάτας, Τηριδάτης, Τηριδάτας; Herzfeld, *Paikuli*, s.v. Tirdat; Justi, *Iranisches Namenbuch*, s.v. Tiridates.

frescoes and their accompanying plaque might have been installed much later still. In 230, during the reign of Severus Alexander, the cohort stationed at Dura was the twentieth Palmyrene, as we know from Cumont, *Fouilles*, Inscr. No. 3; and pending further evidence we may suggest this as the cohort whose officers dedicated the frescoes to Septimius.

#### 6. *The Inscriptions of the Palmyrene Gate and the History of Dura.*

The earliest inscription published by Professor Rostovtzeff was R. 5b, ZOT: 377 S.E. = 65/6 A.D. Three inscriptions in the present series are much earlier: D. 12 (183/2 B.C.), D. 74 (134/3 B.C.), and D. 72 (17/16 B.C.). The date of the *enceinte* walls of the city is still a matter of heated controversy, and the writer has been forced back upon architectural parallels and the creed of MM. Cumont and Renard<sup>1</sup> in defense of these dates; a discussion which has no place here. These inscriptions, in fact, demand Antiochus III the Great, the invader of the Orient, as sponsor of the *enceinte*, which accordingly would result from his second trip to the East, in 205–204 B.C.

The latest date at the Palmyrene Gate is numismatic, not epigraphical.<sup>2</sup> In the towers of the Gate were found a number of coins. A detailed numismatic study will appear later, but it may be stated here that a coin of Antioch<sup>3</sup> in the issue of Philip Senior (244–249) found in room F of the south tower shows occupation until his reign, and upsets the theory of M. Pillet. He believed that the upper part of this tower fell during the earthquake of 160 A.D.,<sup>4</sup> choking the standing remainder so hopelessly that no attempt was made to clear it.

<sup>1</sup> Who believed them to be the original walls of Nikanor. But Professor Rostovtzeff's contention seems much more likely, that the Redoubt must be the only fourth-century construction, and the *enceinte*—"of which the citadel forms a logical, constituent part"—must be later Hellenistic.

<sup>2</sup> As originally edited for the first report, the second line of R. 9 was ΔΟΦ, to be 574 S.E. = 262/3 A.D., and on pp. 50 and 60 deductions were drawn from this as the latest inscription. The reading Νικοφώντος came at the moment of going to press, and the error was not corrected in the later pages. R. 11 gives the date 208/9 A.D., but the soldiers in the undated inscriptions who adopted the *gentilicium* of Caracalla (cf. *Rep.* I, p. 55) can definitely be placed after that. The Palmyrene portion of the bilingual inscription on the stele of Nemesis (cf. *Rep.* I, p. 62) bears the date 540 S.E. = 228/9 A.D.

<sup>3</sup> Macdonald, *Greek Coins in the Hunterian Collection*, III, No. 297.

<sup>4</sup> See above, p. 7.

The destruction of this part of the south tower and the necessarily concomitant collapse of the second arch,<sup>1</sup> which sprang from it, must have occurred with the final abandonment of the city or immediately afterward, as shown by the astonishing preservation of the finds in the towers—parchments, a papyrus, lance-heads of iron still blue as from the forge—which unburied could not have survived a single winter.

But when was this final departure which coincided with the destruction of the Palmyrene Gate? In the several repairs to broken monuments, broken, Professor Rostovtzeff believes, in a Persian invasion of 260 A.D. (cf. *Rep.* I, pp. 59–60), there is acceptable proof of the survival of the city beyond that time. Was Dura left unprotected by the withdrawal of Palmyrene troops to defend their own city against Rome, and did the inhabitants quietly pack up and drift away? In that case we must assume a second disastrous earthquake in the neighborhood of 270, for the fall of the sturdy arch and walls of the Palmyrene Gate was not the result of weathering, and it was not delayed. Rather am I inclined to attribute it to the hands of men, whether in a fresh Persian invasion or in the pursuit of Zenobia by the Romans. The story runs that, fleeing her besieged city to seek aid from the Persians, she was captured at the Euphrates crossing, and it is extremely likely that this was the nearest post, Dura. A small force of Roman legionaries might easily have stormed the then weak town, and assured the observance of peace by setting crowbars to the city's chief portal. At the mercy of marauding tribes and the uncompromising Sassanians, when the definitive downfall of Palmyra precluded further prosperity, the discouraged citizens would have had fair cause to leave. It seems reasonable to fix the close of the city's history at 272 A.D.

So much for the origin and the fate of Dura. What of her period of prosperity?

In inscriptions D. 12 (183/2 B.C.), D. 33 (32/3 A.D.), and D. 79 (78/9 A.D.) we have helpful indices to the dating of the considerable

<sup>1</sup> That this collapse did not take place in 160 A.D., or indeed at any time before the end of the occupation of the city, is further demonstrated by the presence of the stones of this arch which were found filling the passage of the Gate to a height of four meters. It is incredible that through a period for which we have extravagant proof of the use of the passage no attempt should have been made to clear away this blockade.



group (mentioned above, p. 114) of inscriptions in large, shallow hammer-cut letters.<sup>1</sup> It is instructive to list this series separately:

- R. 8. Ἀρτεμίδωρος Πολυνείκου.
- R. 9. Φιλόμηλος Νικοφῶντος.
- R. 11b. Σωκράτης Κ.
- D. 6. Μηνόφιλος Σελεύκου.
- D. 9. Σαλάμις (for Σαλαμάνης? cf. Cumont, Index).
- D. 11. Ἡρακλείδης.
- D. 12. Ἀρτεμίδωρος λρ'.
- D. 13. Ὀλυμπος.
- D. 16. [Σεμισ]ιάβος (cf. Cumont 45).
- D. 23. Ἡρακλέων Δανύμου.
- D. 33. Δαμονικὸς Μάμου δμτ' (cf. Cumont 16).
- D. 36. Γόρας (cf. Cumont 50, 121a).
- D. 43. Μαρροῦς Ζηδαίου τοῦ Μαρροῦ (cf. D. 70).
- D. 44. Ἀμμώνιος.
- D. 45. Ἀπολλώνιος Ἀπολλωνίου Εὐρωπαϊός.
- D. 47. Διόδωρος.
- D. 50. Ἡλιόδωρος.
- D. 51. Νικόλαος.
- D. 54. Βαργάτης (Cumont 6b, 18, 21, 31).
- D. 56. Ἀπολλώνιος Ἀπολλωνίου.
- D. 60. Ἀβιδ[-] Παγηαδάδου (Cumont 114).
- D. 61. Ἡλιόδωρος.
- D. 62. Θεόδωρος.
- D. 70. Μαρροῦς Ζηδαίου (cf. D. 43).
- D. 71. Διόδωρος Πτολεμαίου.
- D. 76. Ἡρακ-.
- D. 78. Βαρχάλβας.
- D. 79. Ἀμμώνιος Ἀπολλωνίου τοῦ Ἀθηνόδωρου ϣτ'.
- D. 80. Δαδιλίτης Βαρχάλβου.
- D. 81. Βαργιναῖος Βαρχάλβου.
- D. 85. Λυσίμαχος Λυσίου.
- D. 87. Ἀπολλώνιος.
- D. 88. Ἡρακλέων Διοδώρου.

<sup>1</sup> The dated inscriptions R. 5b (65/6 A.D.) and D. 72 (17/6 B.C.) are graffiti scratched with a dagger-point, but even here the tendency to the characteristic letter-shapes is seen.

- D. 89. Διόδωρος.  
 D. 90. [-]ος Νικάνορος.  
 D. 93. Θεόδωρος Λισάμσον του 'Ασόδου.  
 D. 94. 'Ηλιόδωρος.  
 D. 95. Νικόλαος Βαρλάου (Cumont 44b, and D. 128).  
 D. 97. [-] Δανύμου.  
 D. 109. [-]ος Σελεύκου.  
 D. 110. 'Ηλιόδωρος.  
 D. 113. 'Αρτεμίδωρος.  
 D. 116. Σαλαμάνους (Cumont, Index).  
 D. 120. 'Αμμώνιος.  
 D. 121. Διόδωρος.  
 D. 122. 'Ηλιόδωρος 'Ηρακλ[-].  
 D. 124. Διοκλῆς.  
 D. 125. [- 'Η]ρακλ[-].  
 D. 126. Διόδοτος.  
 D. 127. Σελεύκος Πα[-].  
 D. 128. 'Ηρόδοτος Βαρλάουτοῦ[-].  
 D. 129. 'Αντίοχος.  
 D. 130. Δημήτριος.  
 D. 131. Γορναῖος.  
 D. 132. 'Ιεραῖος.  
 D. 133. 'Αρτεμίδωρος.

The point need not be labored. It is evident that we have here an enlightening cross section of the pre-Roman city, whose names preserve the Greek tradition—witness Πολυνείκης, Φιλόμηλος, Νικοφῶν, Σωκράτης, Δαμονικός, and 'Απολλώνιος (D. 45) who styles himself a citizen of the Greek city of Europos. There are also Semitic names already encountered in the city by M. Cumont. Only in D. 43 (= D. 70), D. 131, and the group D. 78, D. 80, and D. 81 do we meet unfamiliar non-Greek names.

If on the other hand we investigate the thirty-five inscriptions preceded by the formula *μνησθῆ*, twenty-five immediately class themselves as Roman in date. The following mention *beneficiarii* or *statores*: R. 2, R. 3, R. 5, R. 6, R. 7, R. 8a, R. 10, R. 11, R. 14, C. 8, D. 22, D. 24, D. 25, D. 27, D. 28, D. 30, D. 31, D. 34. D. 22 names a Φλάουιος. R. 12, R. 13, and D. 29 are grouped in dependence on Roman inscriptions. D. 21 is on the third-century frescoes over the south doorway. D. 41 is

Roman with its Grecized *porta*, as is D. 3 which mentions the same man. The ten remaining, R. 11a, D. 1, D. 14, D. 15, D. 20, D. 37, D. 48, D. 68, D. 115, and D. 139 may for paleographic reasons be assigned to the Roman period; in the entire series of religious inscriptions (including C. 3, D. 41, and D. 42, of the Τύχη Δούρας) only one (D. 37) suggests the traditional square characters of Dura; but its letters are small and sharp, in no way resembling the characteristic large shallow letters of earlier times; and its cursive *alphas* and *deltas* betray its late period. All the other  $\mu\nu\eta\sigma\theta\eta$  inscriptions are in a cursive hand unknown at Dura until it was introduced by the Roman soldiers.

In the abbreviation  $\overset{N}{M}$  itself only once (D. 135) is the typical square  $\Pi$  met; everywhere else the shape is M.

This evidence points to only one conclusion; that the Roman army of occupation of 165 A.D. installed at the Gate the sanctuary of the Fortune of Dura.<sup>1</sup>

It was a disappointment of last season that the excavations did not surely prove the location of this shrine. The frescoes of the second court show that in the later period at least this court was roofed, and the location of the altars (*Rep.* I, pp. 42 and 61) to the Genius of Dura (Latin) and the *Gad* (in Palmyrene) make it entirely possible that the seat of the cult was in the passage itself. Weight is lent to this hypothesis by the fact that all the religious inscriptions of the Gate are on the south wall of the inner court, against which stand the altars, except C. 3, C. 8, and D. 139, which are on the north side of the passage, and D. 48, D. 68, and D. 115, in the outer court. It is unlikely that the cult was located in the dark, ill-lit towers.

It is interesting to note the use of the city's two names. Cumont showed (*Fouilles*, Introduction, p. xv) that Dura is formed from the Assyrian word *\*dûru*, "wall," and so is evidence for a pre-Greek city. Isidorus of Charax, writing in the time of Augustus, knew it best as Dura, but stated that it was called Europos by the Greeks; Ptolemy

<sup>1</sup> In *C.I.G.*, III, under No. 4668, is published a group of inscriptions cut by Roman soldiers whose names show the same mixture of Greek, Roman, and Semitic names as the inscriptions of the *statores* and *beneficarii* of the Palmyrene Gate. Several of these include the formula  $\mu\nu\eta\sigma\theta\eta$ . The parallel is too close to be ignored; somewhere on the rocks of the Wadi el-Muketteb, "between Suez and Sinai," Syrio-Roman soldiers had a shrine, and near it they cut their names for remembrance by their guiding divinity, as at Dura. See also above, pp. 96 ff., for further discussion by Clark Hopkins of the  $\mu\nu\eta\sigma\theta\eta$  formula.

mentions an Ἀδδάρα which Dussaud<sup>1</sup> demonstrates to have been Dura. The later writers,<sup>2</sup> in fact, invariably knew it as Dura; whereas Polybius and Lucian speak of it as Europos. At the city itself, however, it may be significant that the five times<sup>3</sup> when *Dura* occurs are all Roman in date; whereas the five appearances<sup>4</sup> of *Europaïos* signifying an inhabitant of Europos are, for paleographical reasons, assigned to the Seleucid or Parthian periods. It would seem that the use of *Europaïos* was confined to official records, and to the ancient families, proud of their Macedonian tradition; while the shorter *Dura*, colloquial among the natives, was the name taken over by the Roman soldiers and thereafter used to the exclusion of *Europaïos*.

Only reflected light is thrown on the pre-Roman organization of the city. Three public offices appear to us with the signatures of their holders, but these are Roman in date. The longest of these inscriptions, D. 41, includes μνησθῆ and a Grecized Latin word, *porta*, so that Selaïos the son of Barnaios, the customs officer (τελώνης), who also commits himself to posterity in D. 3, D. 67, and D. 100, is after 165 A.D. Gosaïos the son of Naastabos, teamed with Naastabos his son (D. 103), by prefixing the date ΕΟΥ' places himself in the time of the Roman occupation. He holds, no doubt in association with his son, the office of gatekeeper (πυλουργός), and he is also βουκόλος. It would seem from this inscription and the one above it, D. 102, that the Romans had replaced Addaios and Akollaïos, associated as gatekeepers, with a man of their own choosing; and the presence of two Semitic names not previously encountered at Dura may stamp him as a member of the expeditionary force of Lucius Verus, recruited nearer the Syrian coast.

It is interesting to find at Dura the familiar τελώνης of Ptolemaic and Roman Egypt and the Palestine of the New Testament. The question of customs duties in the frontier towns of the Fayum in Hellenistic and Roman times has been most fully and capably studied by Ludolf Fiesel: "Geleitzölle in griechisch-römischen Ägypten," in *Nachrichten von der*

<sup>1</sup> *Topographie historique de la Syrie*, pp. 456 ff.

<sup>2</sup> For the literary references to the city cf. Cumont, *Fouilles*, Introduction, pp. lxxv-lxxviii.

<sup>3</sup> Cumont, *Fouilles*, Inscr. 8c; *Rep.* I, Inscr. C. 3, p. 41; *Rep.* I, the Latin inscription on the Roman altar, p. 42; and in the present Report, D. 41 (above, p. 126) and the *tabella ansata* (above, p. 149).

<sup>4</sup> Cumont, *Fouilles*, parchment I (195 B.C.), line 3; parchment II (1st century B.C. or A.D.) B, line 25; and in the present Report, H. 46, H. 47 (above, p. 110), and D. 45 (above, p. 128).



*Gesellschaft der Wissenschaften zu Göttingen*, 1925, pp. 57-107. He traces three taxes, apparently distinct: the regular πεντηκοστή, i.e., 2 per cent tax, διαπύλιον of 1 per cent (ἐκατοστή) and either a "harbor tax" (λιμένος Μέμφεως, the city being likened to a seaport), or the ἐρημοφυλακία, a tax levied as remuneration for guarding the desert routes. This last is the one which interests us most; for, stretching from the Palmyrene Gate at Dura to the city of Palmyra, the next station on the east-west route, was a stretch of unbroken desert, five days' march as tested in February, 1929, by Sir Aurel Stein and the camel corps led by Lieutenant Berthelot. The guarding of this passage was the principal sanction for the establishment of a tax-station; the revenues at Dura probably far exceeded the cost of protection, the balance perhaps going to Rome; but this must have been the basis of the Roman tariff laws in the desert. Note that the personnel of a station in the Fayum consisted as at Dura of a τελώνης and his scribes and collectors, of an ἐπιτηρητής not represented at Dura, and of gendarmes—ἀραβοτοξόται, Arab archers.<sup>1</sup>

Connected with this is a royal ordinance, *Tebtunis Papyri*, I, 5, where in lines 34-35 πυλή is identified with the customhouse; at Dura it has become πύρτα for *porta*, but πυλουρός is retained as the name of the official.

From Parthian Mesopotamia itself comes a still more pertinent parallel. About 45 A.D. the philosopher Apollonius of Tyana started upon a long journey to the East. Setting out through Mesopotamia, he came to Zeugma<sup>2</sup>—the story is told by Philostratus in his *Life of Apollonius*, I, 20:

-παριόντας δὲ αὐτοὺς ἐς τὴν μέσην τῶν ποταμῶν ὁ τελώνης ὁ ἐπιβεβλημένος τῷ Ζεύγματι πρὸς τὸ πινάκιον ἤγε καὶ ἡρώτα ὃ τι ἀπάγοιεν, ὁ δὲ Ἀπολλώνιος "ἀπάγω" ἔφη "σωφροσύνην δικαιοσύνην ἀρετὴν ἐγκράτειαν ἀνδρείαν ἀσκήσιν," πολλὰ καὶ οὕτω θήλεα εἴρας ὀνόματα. ὁ δ' ἤδη βλέπων τὸ ἑαυτοῦ κέρδος "ἀπόγραψαι οὖν" ἔφη "τάς δούλας." ὁ δὲ "οὐκ ἔξεστιν," εἶπεν "οὐ γὰρ δούλας ἀπάγω ταύτας, ἀλλὰ δεσποίνας."

This is self-explanatory. The πινάκιον was undoubtedly a stele upon which were listed tariff laws like the tariff laws of Palmyra (Dittenberger, *O.G.I.S.*, II, 226, 629), Zaraï (*C.I.L.*, VIII, 4508), and Cop-

<sup>1</sup> See P. Amh. 77; U. Wilcken, *Chrest.*, No. 277.

<sup>2</sup> This must be the Zeugma of the upper Euphrates, though Philostratus relates the anecdote as an incident on the way from Nineveh to Babylon. Philostratus' geography is often at fault.

tos (*I.G.R.R.*, I, 1183). Dura surely had her own tariff law, and it was evidently posted upon the stele found *in situ* outside the Palmyrene Gate (*S* on Pl. II, above, p. 9). This stele was formed of a smooth wall of mud brick framed in stone; the plaster facing of this wall has disappeared, and the tariffs are hopelessly lost.

Philostratus has also obligingly clarified the functions of the *πυλουργός*, *ibid.*, I, 27:

-ἀφικομένῳ δὲ αὐτῷ ἐς Βαβυλῶνα ὁ σατράπης ὁ ἐπὶ τῶν μεγάλων πυλῶν μαθὼν ὅτι ὑπὲρ ἱστορίας ἦκοι, ὁρέγει χρυσὴν εἰκόνα τοῦ βασιλέως, ἣν εἰ μὴ προσκυνήσῃ τις, οὐ θεμιτὸν ἦν ἐσφοιτᾶν ἔσω. πρεσβεύοντι μὲν οὖν παρὰ τοῦ Ῥωμαίων ἄρχοντος οὐδεμία ἀνάγκη τούτου, παρὰ βαρβάρων δὲ ἦκοντι ἢ ἀφιστοροῦντι τὴν χώραν, εἰ μὴ τὴν εἰκόνα προθεραπεύσειεν, ἄτιμον ἀπειλῆσθαι· καὶ σατραπεύεται παρὰ τοῖς βαρβάροις τὰ οὕτως εὐήθη. ἐπεὶ τοίνυν τὴν εἰκόνα εἶδε "τίς" ἔφη "οὗτος"; ἀκούσας δὲ ὅτι ὁ βασιλεὺς "οὗτος," εἶπεν "ὃν ὑμεῖς προσκυνεῖτε, εἰ ἐπαινεθῇ ὑπ' ἐμοῦ καλὸς κάγαθός δόξας μεγάλων τεύξεται," καὶ εἰπὼν ταῦτα διὰ πυλῶν ἦει. θαυμάσας δὲ ὁ σατράπης αὐτὸν ἐπηκολούθησέ τε καὶ κατασχὼν τὴν χεῖρα τοῦ Ἀπολλωνίου δι' ἔρμηνέος ἤρετο ὄνομά τε αὐτοῦ καὶ οἶκον καὶ ὃ τι ἐπιτηδεύοι καὶ ἐφ' ὃ τι φοιτῇ, καὶ ἀπογραψάμενος ταῦτα ἐς γραμματεῖον στολὴν τε αὐτοῦ καὶ εἶδος ἐκείνον μὲν περιμεῖναι κελεύει, δραμῶν δὲ αὐτὸς παρὰ τοὺς ἀνδρας, οἳ δὴ νομίζονται βασιλέως ὧτα, ἀνατυποῖ τὸν Ἀπολλώνιον προειπὼν, ὅτι μὴτε προσκυνεῖν βούλεται μὴτε τι ἀνθρώπῳ ἔοικεν.

The σατράπης ὁ ἐπὶ τῶν μεγάλων πυλῶν was certainly equivalent, on a larger scale, to the *πυλουργός* of Dura, charged with the questioning of travelers who sought admission to the city as to their names, homes, occupations, and purposes of travel, much as at modern frontiers.

In late Babylonian theology we find an unexpected parallel to this. It was believed that the soul had to pass after death through a succession of spheres. The gates of the spheres were watched by—in Greek—ἄρχοντες, and the frontiers by *τελώνια* (cf. Cumont, *Rel. Or.*, 4th ed., p. 117). *Πυλουργοί* are also found guarding the gates of the acropolis at Athens; cf. *I.G.*, III, 1284.

That these offices were Roman creations at Dura, nonexistent before the occupation of 165 A.D., is unthinkable in the light of these passages from Apollonius' journey. They must certainly reflect the Parthian and perhaps even the Seleucid organization of the city.

The title *βουκόλος* deserves special discussion. As designating an occupation like that of the *γεωργός*, the *ποιμήν*, the *μηλονόμος* or the *αἰγοβοσκός* it appears very frequently on the papyri of Egypt (cf. references in

Preisigke, *Wörterbuch*). To explain the present inscription it is necessary to look further. Perhaps a clue is provided by *Oxyrhynchus Papyri*, IV, No. 729. In this document provision is made for one Sarapion to supply oxen for a water wheel. Five calves and three oxen are leased for a year, and the original valuation of these animals is stated: 2500 drachmae. At the end of the year Sarapion may choose either to receive this sum, or the animals at a revaluation. If this valuation is higher, Sarapion is to pay the lessees the difference; if it is lower, they are to pay Sarapion the difference. In this instance, we may assign Sarapion a higher rank in the community than that of cowherd; he was a breeder of bulls; and this was in all probability the occupation of Gosaïos. Each autumn every small farm along the river plain below Dura needed three or four days' use of a team of oxen for the annual sowing; but these animals were too costly to be maintained by the poorer natives. It became a community necessity to furnish oxen, and as a state duty it was farmed out, as was the position of collector of customs, no doubt to the highest bidder. He kept a herd at the public command, renting out teams by the day at a fixed charge to the farmers of the region.

Professor Rostovtzeff, however, points to the *boukoloi* who were members of Dionysiac cults; such cults are found at Pergamon, and apparently through all Asia Minor, in the contemporary time of Lucian (*De Saltat.*, 79) and in Rome as well. A Bacchic *thiasos* at Palmyra is discussed by H. Ingholt in *Syria*, 1926, pp. 128 ff., and possibly *boukolos* indicates Gosaïos' degree in such a cult; though whether he would join this to his title of gatekeeper is a matter of question.<sup>1</sup>

In the second quotation from Philostratus reproduced above, we passed over the explanation of one of the most puzzling of the inscriptions of the Palmyrene Gate, D. 42. The text, as far as it is decipherable, reads ὅστις προσκυνεῖ τῇ τύχῃ τῆς Δούρας. . . . It is very unfortunate that the condition of the stone prevents the reading of any but scattered letters after this, as it is certain that the older custom encountered by Apollonius at Babylon, of insisting that travelers salute a god of the city or the image of the king as evidence of good faith, was continued by the Romans and applied to their Fortune.

One of the inscriptions was cut by an individual who announced himself as one of the *Caesariani*. This is originally the designation of the

<sup>1</sup> Cf. also F. Cumont, *Les Religions Orientales*, 4th ed. (1929), p. 308, note 39, and p. 311, note 68, for a discussion of eastern phases of the Dionysiac cults.

domestic servants of the emperor (Martial, IX, 79, etc.). Later the term was narrowed down to mean certain minor government officials, but in this sense it is not met until 290 A.D. In this inscription of 165 A.D., it must mean that Naboumalachos was a body-servant of Lucius Verus, who thus is seen to have adopted to some extent the surroundings of the emperor on his arrival in Syria. This group is discussed in Pauly-Wissowa, *s.v. Caesariani*, and by Otto Hirschfeld in his *Die Kaiserische Verwaltungsbeamten bis auf Diocletian*, 2d ed., p. 472, note 3.

The only innovations of the Roman occupation at the Palmyrene Gate, then, were the establishment of the shrine of Fortuna and the possible replacement of local gatekeepers with their own nominees for the office. In the *tabella ansata* (above, pp. 149 f.) there is further evidence that the Romans did not materially interfere with the governorship of the city; for there the *strategos* to whom and to whose family the officers of "the cohort" set up the plaque is one Lysias, member of a clan known from the inscriptions of the Temple of Artemis to have held high rank in the city a hundred years before, ἐπάνω ὄντες Εὐρωπαῖοι. Probably Lysias was the donor of the frescoes, and this is the return honor bestowed upon him by the grateful officers. Can this be taken as evidence that this cohort or part of it was recruited at Dura itself? The mayor would not take so much interest in stranger troops. A city whose area could have accommodated a population of from six to eight thousand people, to which must be added the dwellers in the farms of the river plain, could certainly have supplied a good share of the five hundred men required for minimum cohort strength.

The civil government, then, remained in the hands of the citizens of Dura. But the *strategos* in Parthian times can bear the additional title *epistates*,<sup>1</sup> a position which seems to have carried military or police powers distinct from the civil administration of the municipality involved in the title *strategos*. The Romans must have disliked this concentration of power in one man, for in Cumont 53, dated very soon after the occupation by Lucius Verus, the dedicant signs himself simply

<sup>1</sup> Cf. Cumont, *Fouilles*, Nos. 118, 134, and in the present Report No. H. 4 above. (The reading of Cumont 91 is doubtful.) An undated inscription from Babylon (Dittenberger, *Orientis Graecae Inscriptiones Selectae*, I, No. 254) mentions a certain Democrates as *strategos* and *epistates*, as well as τεταγμένος δὲ καὶ ἐπὶ τῶν ἀκροφυλακίων. This inscription has on paleographical grounds been assigned to the early second century before Christ, and if so is evidence for the joining of these functions in the Seleucid period.



Αὐρήλιος Ἡλιόδωρος ὁ ἐπιστάτης. The functions were certainly separate at that time. It is not surprising, then, that we find Lysias, the *strategos* commemorated in the *tabella ansata* of the early third century, without the police powers implied in the title *epistates*. Instead we find Roman tribunes, who hold the military powers once exercised by the *epistates* as deputy of the *hyparchos* of the larger division of the Parthian feudality.

## II. MISCELLANEOUS EPIGRAPHICAL FINDS FROM THE CITY

### 1. *A Horoscope Inscribed on the Wall of a Private House.*

Graffiti have already been encountered on the plaster walls of private houses of Dura; cf. Nos. 129–131 in Cumont, *Fouilles*. In 1924, after the close of Cumont's campaigns, there were no scientific excavations, but soldiers stationed on the site to prevent clandestine archaeology dug informally in a number of houses. The members of the staff in 1928–29 noticed on these house-walls a series of graffiti, both pictorial and epigraphical. Elsewhere in this Report is reproduced a representative group of the pictographs (Pls. XLI, 2; XLII, 1; XLIII, 2); until they receive the attention of a papyrologist publication of the inscriptions has been deferred, with the exception of the horoscope herewith discussed.<sup>1</sup>

The house in which it is situated lies east of the Temple of Artemis. The horoscope is inscribed on the basic layer of plaster of the south wall of the principal room. The plaster was renewed several times in the ancient period, and the foundation layer was deeply hacked to provide foothold for the new. The later layers have largely broken away, disclosing underneath a number of inscriptions, five or six pictographs of Parthian horsemen, and the horoscope (Pl. LI, 1 and 2).

It consists of an almost circular ellipse, 0.103 m. high and 0.084 m. wide, divided by two diameters intersecting at right angles, one con-

<sup>1</sup> A list of publications of horoscopes on papyri found in Egypt is included with the discussion of No. 1476, *Oxyrhynchus Papyri*, Vol. XII. To these must be added No. 641, in Perdrizet et Lefèvre, *Graffites grecs du Memnoneion d'Abydos*, on the plaster wall of a temple. In these horoscopes the names Κρόνος, Ζεύς, Ἄρης, Ἀφροδίτη and Ἑρμῆς are used for the planets, whereas in the Dura horoscope the names follow the earlier literary tradition, Φαίνων, Φαέθων, Πυρόεις, Φωσφόρος, Στίλβων; these names are also found on an astronomical table at Rhodes: *Inscriptiones Graecae*, XII, fasc. 1, No. 913.

Horoscopes as a means of divination are taken up by Cumont in Daremberg-Saglio, *s.v. Zodiacus*, and in Bouché-Leclercq, *Histoire de la divination dans l'antiquité*, I, Chapter 6, "Divination sidérale ou astrologie," pp. 205–257.

necting the zenith with the nadir, the other the point in the heavens which was rising (*ῥοσκόπος*, the *horoscope* proper) with that which was setting. In this it closely resembles a hitherto unique horoscope on papyrus (*Oxyrhynchus Papyri*, II, No. 235: No. 4051 in the collection of the Cambridge University Library) which illustrates as well as describes verbally the position of the heavens at the birth of the individual concerned. In the present subject the signs of the zodiac are marked outside the circle, occupying roughly the positions of the hours on a clockface, and, distributed among the signs to which they belong, are the sun, the moon, and the planets. The diagram, as will be shown, can be completely restored; the sun and moon, lost in gouged-out places, were respectively in Cancer and Scorpius. *Ῥοσκόπος* has been omitted, but, on the exact analogy of the *Oxyrhynchus* horoscope referred to above, the left-hand terminus of the horizontal diameter is seen to have indicated the rising sign. All the names are abbreviated<sup>1</sup> to the first syllable and the initial consonant, if there were one, of the second syllable, except in the short word *Λέων*. The letters average 0.01 m. high.

Reading counterclockwise from the top:

ΤΟΞ for Τοξότης (Sagittarius).

ΑΙΓ for Αἰγόκερως (Capricornus).

[ΥΔ]Ρ for Ὑδροχόος (Aquarius).

ΙΧΘ for Ἰχθύες (Pisces).

ΚΡΙ for Κριός (Aries).

ΤΑΥ for Ταῦρος (Taurus).

ΔΙΔ for Δίδυμοι (Gemini).

ΦΑΙΝ for Φαίνων (Saturn).

ΚΑΡΚΦΑ[ΕΘ] for Καρκίνος (Cancer) and Φαέθων (Jupiter).

ΠΥ

ΛΕΩΝΦΩΞΦΞΤΙΑΒ for Λέων (Leo), Πυρόεις (Mars), Φωσφόρος (Venus),  
and Στίλβων (Mercury).

ΠΑΡΘ for Παρθένος (Virgo).

ΖΥΓ for Ζυγός (Libra).

Where Scorpius was originally inscribed the plaster has been hacked out.

<sup>1</sup> Cf. *I.G.*, XIV, No. 705, a sun dial from Pompeii, and *C.I.G.*, III, 6179, a sun dial at Rome, in which the names of the signs of the zodiac appear, similarly abbreviated.

"Ἡλιος, the sun, can be restored in Cancer. Mercury is always within  $28.4^{\circ}$  of the sun, limiting the sun's position in this instance to Leo and the signs adjacent to it, Virgo and Cancer. As it does not appear in Virgo and Leo, where the plaster is preserved, Cancer alone is possible.

Professor Ernest W. Brown of the Department of Astronomy of Yale University was consulted, and at his request Dr. Dirk Brouwer worked out the problem presented: Given the sun and Jupiter in Cancer,<sup>1</sup> Mars and Venus and Mercury in Leo, Saturn in Gemini, and the moon limited to Aquarius, Scorpius, and Cancer, is it possible to date the document within the limits of occupation of the city, 300 B.C. to 275 A.D.?

The results of the calculation were as follows:

	July 3-5, 176 A.D.	July 10-12, 176 A.D.	
Sun	$102^{\circ}$	$109^{\circ}$	Cancer.
Moon	Scorpius	Aquarius	
Mercury	$130^{\circ}$	$136^{\circ}$	Leo.
Venus	$122^{\circ}$	$131^{\circ}$	Leo.
Mars	$144^{\circ}$	$149^{\circ}$	Leo.
Jupiter	$108^{\circ}$	$108^{\circ}$	Cancer.
Saturn	$61^{\circ}$	$61^{\circ}$	Gemini.

"The longitudes are counted from the equinox of date, thus including the precession. From what is known from the ancient astronomers there is little doubt that this is correct. Careful examination has left the dates above as the only possible dates."

Then this horoscope is dated to July 3-5, 176 A.D., if the moon was in Scorpius, and July 10-12, in the same year, if the moon was in Aquarius. It proved impossible to suppose the moon in Cancer, for in that circumstance the relations of the other planets did not hold.

With this clue the first line of letters above the horoscope was deciphered from the photograph as ΖΠΥΠΑΝΘ for (Ἔτους)ζπυ' Παν-(ἡμου)θ; Panemos 487 S.E. is approximate to July, 176 A.D. The June

<sup>1</sup> Dr. Alfred R. Bellinger, who has examined the horoscope *in situ*, reads KAPKIN at five o'clock rather than KAPKΦA. I am still convinced of the reading from the squeeze and photograph. Even if it is not possible to read ΦA in Cancer, its restoration there is in any case certain, as will be shown.

new moon in that year occurred in the longitude of Babylon at 9.56 A.M., June 24, and the new moon's appearance the following evening, June 25, introduced Panemos 1, which ran from sunset June 25 to sunset June 26. Eight days later, Panemos 9, was July 3/4, satisfying the astronomical requirement that the moon reach Scorpius. In Scorpius, then, is Selene restored.

Dr. Brouwer's results were strikingly confirmed. M. Cumont's assumption (*Fouilles*, p. 347) that the years marked on the Dura inscriptions are of the Seleucid Era (the Parthian Era, for instance, might have been proposed) is shown to be correct. It was already known from the occurrence of an intercalated Dystros that Dura kept the lunar calendar until a late period, but this is a tangible demonstration of the system of lunar months; and it is the first example at Dura of a lunar date after the Roman occupation, an event regularly followed elsewhere by the adoption of the Julian calendar.

Aside from its importance as the first correspondence between the Julian and Macedonian calendars in this late survival, this date is extremely interesting as the first index to the dating of a private house in the city. It is on the foundation layer of plaster,<sup>1</sup> as has been noticed, and experiments made with an excavation knife showed that the plaster, once hardened, can not be cut with a tool of moderate sharpness. It must have been inscribed while this layer of plaster was wet, within a few days at most of the completion of the building. That this part of the city was not built up earlier is incredible, and we must assume a rebuilding after the general destruction caused by the earthquake of 160 A.D.

We should expect this to be the horoscope of an individual; and the second line of the upper inscription, so far undeciphered, may prove to be his name. Horoscopes of cities, however, are not unknown, and when the fact that this horoscope was cast about the time of completion of this dwelling is taken into consideration, it appears possible that this was the house's horoscope.

## 2. *An Inscribed Storage Jar Commemorating Patrokles.*

On the crest of the interior ravine, under the redoubt, several buildings, evidently private houses, were excavated during the informal operations of 1924. On the heap of earth thrown out of one of these

<sup>1</sup> Professor Bellinger disagrees with this statement.



houses was found a sherd bearing a faint inscription in ink.<sup>1</sup> The sherd measures  $0.30 \times 0.22$  m., and from the curve and the thickness of the ware, 0.016 m., it is seen to be from a large storage jar. The last few letters of each line are broken away, suggesting that the jar was entire when the inscription was written. This is borne out by the disposition of the inscription parallel to and just below the lip of the jar.

The photograph shows only faint traces of the letters, and the tracing here reproduced is only approximately accurate. The letters are one centimeter in height and written in a careful, clear hand:

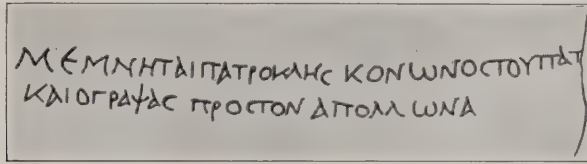


Fig. 24.

Facsimile of an inscription in ink on a fragment of a storage jar

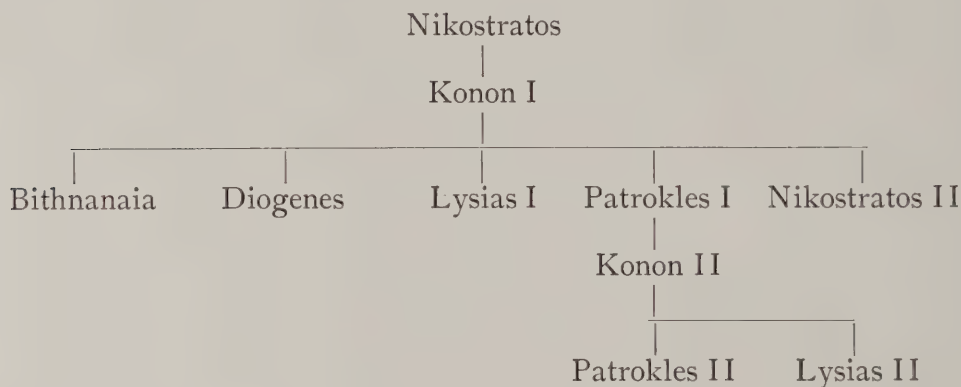
Μέμνηται Πατροκλῆς Κόνωνος τοῦ Πατ[ροκλέους ὅς]  
καὶ ὁ γράψας πρὸς τὸν Ἀπόλλωνα///

This family is already known to have been prominent at Dura; cf. Cumont, *Fouilles*, parchment II, A 10, inscriptions Nos. 1, 5, 24, 29, 109, 110, 111, and perhaps others; cf. Κόνων, Νικόστρατος, Πατροκλῆς, etc., in Cumont's Index. For the most important of these inscriptions, Nos. 5, *a-h*, Cumont had to depend on the readings of Breasted, *Oriental Forerunners of Byzantine Painting* (cf. p. 101), for the Bedouins had defaced the walls in the interval. Breasted has read Πάτροκλος whereas the present inscription has Πατροκλῆς. Πατροκλέους, the regular genitive of Πατροκλῆς, was astonishing as derived from Πάτροκλος, and prompted Cumont to an observation on the decadence of the dialect of Dura. It was considered unwise last season to take down the protecting banks of earth from the frescoes for the purpose of verifying Breasted's readings, if the inscriptions should be still preserved, but the inscription published by him may read Πατροκλῆς. There can be no doubt that we are dealing with the same family.

<sup>1</sup> Jars as well as *ostraka* similarly inscribed in ink have been found at almost every excavation of an ancient site; but these inscriptions usually pertain to the commodities contained in those jars, and the religious aspect of this is rare or unique.

There is in fact a strong probability that the Patrokles mentioned on the sherd is the son of the Konon II and grandson of the Patrokl(e)s of the genealogical table given by Cumont, *Fouilles*, p. 360. The Lysias, son of Konon and grandson of Patrokles, who is mentioned in inscription 1, would be the brother of the Patrokles of the sherd; and the fact that Lysias did not take his grandfather's name indicates that he had an elder brother Patrokles. Lysias dated his inscription, No. 1, in 115 A.D., and the sherd which bears the name of his brother Patrokles is thus connected with the early second century after Christ. This furnishes a possible *terminus ante quem* for the house from which it came.

The genealogical table may be extended as follows:



This strengthens the theory of Cumont under which he assigned the famous frescoes to the ten years preceding 75 A.D. If Lysias II was the prosperous head of a family in 115 A.D., when he erected a shrine to Zeus out of his personal fortune, he was probably between forty and fifty years of age, and would have been adolescent between 65 and 75 A.D. Cumont's suggestion seems very reasonable, that the adolescent in the foreground of the painting, whose name proved indecipherable, is Lysias II—if it is not in fact his brother Patrokles II. In either case, the age of their father, Konon II, would confirm Cumont's conclusions regarding the date of the frescoes.

The form MEMNHTAI has not occurred in this usage before. It is connected with the form MNHCΘH common at Dura and at many other sites, and with MNHCΘEIH, which also appears for the first time in the present publication (pp. 96 ff.). The translation "Patrokles . . . *has mentioned himself* before Apollo" seems required here.

Professor Rostovtzeff has observed that the singular form of the verb

shows that Patrokles is the same individual as ὁ γράψας, "the writer." In this construction the correct literary form should be [ὅς] | καὶ ὁ γράψας, as restored.<sup>1</sup>

We now have certain proof of the worship of Apollo at Dura. Theophoric names formed from Nabou- and Apollon- (M. Cumont has already spoken of this identification, *op. cit.*, p. 200) have already pointed to this worship. In fact, there was found in room E of the Temple of Artemis a small sculptured head of Apollo (or Bacchus; cf. Cumont, p. 225). It is unlikely that this was from the cult statue, but it might have been an ex-voto, and perhaps room E was Apollo's shrine. On the other hand, the inscription suggests that this storage jar was dedicated, with a content of wine or oil or grain or other commodity welcome to the god, actually in the shrine of Apollo, and we may find that the unexceptional building which was its provenance was that god's temple.

There are faint shadows after the word 'Απόλλωνα. They have been read as KAI, suggesting the restoration καὶ [τὴν 'Αρτέμιδα], as KAP, for Καρ[υεῖον], and as a date, ΓΛΥ, 121/2 A.D., which would fit our thesis admirably. The writer, however, believes that the inscription actually ends with 'Απόλλωνα.

### 3. *New Inscriptions from the Temple of Artemis.*

Since the campaigns of M. Cumont in the Temple of Artemis, the winter rains have washed down the fill in the *Salle aux Gradins* and in room C, bringing to light six new inscriptions. Operations at the temple were resumed in 1929-30, and a new series of inscriptions has resulted from these explorations, but it has seemed best to publish the present group without delay.

1. The stone to the right of Cumont 99, on the lowest of the right-hand steps in the *Salle aux Gradins*, is inscribed

σις ΠΑΤ | ροκλέους

<sup>1</sup> This exact form has not been met in inscriptions; cf., however, Cumont, *Fouilles*, No. 39 (wrongly indexed as No. 38), Waddington 2464, *Princeton Expedition to Syria*, III B, Nos. 1203 and 1204, *I.G.*, XII, 3, 1235, *C.I.G.*, 9574, and numerous inscriptions in Egypt, quoted in Preisigke, *Sammelbuch*, Nos. 1817, 4549, 4556, 4564, and many others; also 6632. In many of these last, *proskynemata*, ὁ γράψας is the scribe, distinct from the person doing reverence, but in every case this distinction is brought out with grammatical clearness.

One or possibly two lines are broken away at the top. The letters are 0.04 m. in height.

The name Patrokles is well known at Dura (cf., above, pp. 165 ff.); but this person cannot be connected definitely with any other of the name.

2. On the stone to the right of Cumont 92, on the third of the left-hand steps of the *Salle aux Gradins*, three letters may be deciphered:

ШСІ

- ωσι -

The rest of the face of this step has been badly weathered.

3. A stone lying loose in the *Salle aux Gradins* bears two lines of an inscription:

TAKATQY

[ - - ]τακάτου

ΑΓΙϚΒΗΛQY

[ - - \*P ]αγισβήλου

The emendation is due to Professor Torrey, who compares with it רָגַל-שֶׁבַל, "noticed of Bēl."

Line 1 may also be read [ - - ]τακα τοῦ.

The letters are 0.04 m. in height.

4. A stone lying unattached in room C bears this inscription:

THE  
ΕΤQYC ΘΤ ΤΙΜΩΝΑϚϚΗΜΙΔΩ  
ΑΛΕΞΑΝΔΡQYΒΥΓΑΤΡQ

(Cumont 59)

Ἔτους θτ'. Τιμωνάσσης τῆς Μίδω|νος τοῦ  
'Α λ ε ξ ά ν δ ρ ο υ θ υ γ α τ ρ ό Ϛ

The block on which this appears is 0.765 m. long, 0.21 m. high, and 0.42 m. wide. It has the same type of molding as Cumont 59, which, as indicated, joins the present inscription on the right. The letters average 0.03 m. high.

This inscription completes the reading of Cumont 59a. M. Cumont's restoration of Μείδωνος is verified, though the spelling is to be corrected. Another branch is added to the family tree; Timonassa is the daughter of Midon and Philopatra, and sister of Danymos. The year 309 S.E. is 4/3 B.C.

5. This stone also lies unattached in room C. The present length is



0.50 m., the height 0.15 m., and the width 0.30 m. The letters are small and faint, and widely spaced:

[᾽Ετου]ς Γοτ'. [.]α -

The date 373 S.E. is 61/2 A.D. This date is found in several other inscriptions of the Temple of Artemis.

6. This stone also lies unattached in room C. Both ends are broken off. The letters are 0.025 m. high:

- νω γυναικός

#### 4. *A Revision of Certain Inscriptions Published by Cumont.*

Opportunity is taken at this time to reëdit several of the inscriptions published by M. Cumont in *Fouilles de Doura-Europos*, Chapter VI.

26c. ᾽Ε[ρ]μίας Ἑρμίου perhaps should be read instead of Ε[ί]πίας Ἑρμοῦ. It is always difficult to distinguish between mu and pi for the sign Π.

43, line 4. Mr. Hopkins has seen a small alpha between the beta and the rho, and a small gamma between the rho and the alpha. He reads therefore Βαργάδας ΕΘΑ instead of Cumont's reading Βραδασεθα.

50. Parenthesize γαλλοφύ(λαξ) instead of γαλλοφ(ύλαξ). This may be seen on the photograph, Pl. CXII, 3, 4.

59. [Μεῖδω]νος: the name is preserved on the new inscription published above (No. 4) as Μιδωνος.

81. The name in line 1 is Λυσανίου, not Λιβανίου. The upsilon is clear in the photograph, Pl. CXV, 6, and the following letter is not beta. The only possible reading is Λυσανίου.

87. M. Cumont has restored ᾽Απολλοφάνου correctly; all the letters may be seen on the stone.

88, line 2. Read Λυσίου τοῦ Σελεύκου γυνή instead of Λυσίου[δὲ τοῦ... ]ου γυνή.

90. I prefer to read Ζηνείγρα Γήσου instead of Ζηνεῖς Βαγήσου. Where Cumont reads two consecutive iotas I saw only one; the next letter is more probably gamma than sigma, having no perceptible lower horizontal stroke; and the following letter is rho, not beta. Professor Torrey suggests עֵשָׂו, עֵשָׂו, the Hebrew *Esau*, as the Semitic equivalent of Γήσου; עֵשָׂ (pronunciation uncertain) occurs as a Nabataean proper name, *Ephemeris*, II, 265.

91. There is not room on the stone for the letters [στρ]α[τηγοῦ καὶ] of Cumont's restoration.

92. Read Λυσιμάχου instead of Λυσίπ[π]ου.  
 95. A second line can be read, apparently containing the single word γυναικός.  
 96. [A]πολλωνίου seems preferable to [Ἀμμ]ωνίου.  
 98, line 2. Read Σπράτωνος instead of Σιφάτωνος.  
 99. Read ΕΤΟΥΣ ΓΟΥΤ instead of ΕΤΟΥΓΓΟΥΤ in the facsimile.  
 102, line 2. The name at the left is Θεόφιλος.  
 107. Read Θε[ο]δώρα instead of Ἡροδώρα. Continuing toward the right:

γούτ'. Θε[ο]δώρα Ἀθηνοδώρου ἢ Ἀθηνοδώ[ρ]ου δὲ γυνή.

112. Read "Ετους γούτ' Ἀν[-----γυ] νή αὐτοῦ καὶ τὰς θυγατέρας.

112a. The name at the end of the first line is Μενάνδρου.

114. Βαργάτου, a name frequently met at Dura, seems preferable to Σαργᾶ τοῦ. The initial letter more resembles a beta than a sigma.

Professor W. F. Albright of Johns Hopkins University has very kindly contributed a note on No. 129:

The Aramaic inscription Cumont, No. 129 has given rise to some discussion. Following Della Vida's reading of the text, Noth (*Orientalistische Literaturzeitung*, 1928, 555 f.) suggested that the second word, read by the former ארת, is the feminine of Phoenician *adôn*, "lord," and should be pronounced approximately *adôt*, which he combined with the difficult ארת of the Eliba'al inscription from Byblos and the Phoenician inscription recently discovered at Ur. He thought that *Adôn*, *Adôt*, and *Bar Adôn* were names of divinities, forming a triad not otherwise recorded of father-god, mother-goddess, and divine son. This ingenious combination was justly rejected at once by Della Vida himself (*OLZ*, 1929, 17), who pointed out that the words must represent proper names. The Italian scholar also noted that Dussaud had proposed to read מרן ומרת ובר מרן because of the adjacent Greek graffiti MAPINOC, MAPEINOC, MAPINOC ΥΙ(OC). This reading Della Vida rejected because of the form of the initial letter of the names, which he thought could only be an *aleph*.

In the same issue (*OLZ*, 1929, 18), Lidzbarski independently discussed Noth's suggestion, which he rejected, along with Della Vida's reading, observing that the initial letter of the names could only be *mēm*. In this both Lidzbarski and Dussaud are certainly correct; no specialist could hesitate to accept their reading, even if not that of the two most eminent Semitic epigraphers of our day. With regard to the interpretation Lidzbarski observed: Die Erklärung des aramäischen Graffito bietet Schwierigkeiten. Es sieht so aus, als ob מרן ומרת Appellativa mit Suffixen wären: "unser Herr," "meine Herrin." Aber dagegen spricht der Name MAPINOC. מרן ist bereits der Form des griechisch-latein-

ischen Namens genähert. Das aramäische **בר מרין** kann nur "Sohn des Marīn" heissen. Aber nach **MAPINOC YIOC** scheint der Sohn auch **MAPIN(OC)** geheissen zu haben.

While fully agreeing with the reading of the initial letter as *mēm*, I do not believe that Lidzbarski went far enough in his criticism of Della Vida's reading. I am convinced that we should read **מרן ומרין ובר מרין**. It is true that the *yôd* before the *nûn* in **ומרין** appears to slant to the left until it touches the shaft of the *nûn*, but this may easily be an exaggeration of the original. In any case the vertical shaft is too long for a *tau*. I would render "Marin and Marīn and the son of Marīn," leaving the vocalization of the first name doubtful. Of course, we might render: "Our lord and Marīn and the son of Marīn," but in view of the Greek graffiti this does not commend itself.—W.F.A.

131. Read **ΑΒΓΔΕΖΗΘ[ΙΚΛΜ, etc.]**, the alphabet, instead of **Ἀβιδέ-ζης**. An alphabet appears in one of the frescoes at the Temple of the Palmyrene Gods. Cumont (p. 119) discusses it and (note 1) lists several studies of the mystic associations of the alphabet.

## IV

### THE SAFAITIC INSCRIPTIONS

BY C. C. TORREY

AMONG the inscriptions unearthed at Dura in the course of the second campaign were several of those commonly called Safaitic. They were found in the Palmyrene Gate.

The inscriptions of this type have been well known for sixty or seventy years, though their decipherment—still not quite satisfactory—is of much more recent date. De Vogüé published a considerable collection in one of the volumes of his *Syrie Centrale (Inscriptions Sémitiques, 1877)*, and the number has since then been greatly increased by Littmann, Dussaud, and others. The publications of especial importance are Littmann's *Zur Entzifferung der Safā-Inschriften, 1901*, and his *Zur Entzifferung der thamudenischen Inschriften, 1904*; Dussaud et Macler, *Mission dans les régions désertiques de la Syrie Moyenne, 1903*; and the two discussions in the second volume of Lidzbarski's *Ephemeris für semitische Epigraphik*. The inscriptions are typically rough scrawls, rarely scratched deeply in the surface of the rock which contains them. The language is Arabic, as is shown by the consonants and by the occurrence of characteristic words. It is easy to ascertain that we have in these graffiti the work of nomads, roving tribesmen, who have "registered" here and there in the desert, inscribing their names, and perhaps a word or two more, on any convenient stone where they happened to make halt. Longer inscriptions are very rare. Some boulders, or walls of rock, are crowded with names, more or less legible, and rude artistic efforts—men, camels, horses, gazelles—are not infrequent.

The most interesting feature of these inscriptions is the alphabet which they employ, with the history which lies behind its use. It is South-Arabian, although the language is that of the northern Arabs rather than the southern. This is a fruit of the great northward migration of Yemenite Arabs in the second century A.D. The tribes moved as units, sometimes in association, and eventually covered an immense distance, the more adventurous groups pushing far into the Syrian desert. Several more or less permanent halting places on the way are marked by areas of inscriptions differing from one another chiefly in the extent



to which they preserve the old Yemenite script unchanged. Three such types are recognized: the Lihyanic, the Thamudenic, and the Safaitic. The inscriptions of the type first named, found in a single district in northern Arabia, merely represent the transplanting of a bit of South-Arabian civilization; and thus differ essentially from those of the two other types, which are the work of the Bedouin. The Thamudenic monuments, farther north, show in numerous particulars a departure from the parent script, and this variation is considerably increased in the Safaitic writing.

It was long customary, and still is to some extent, to style these monuments, particularly the Thamudenic, "proto-Arabian," with the implication that this was the script used by the northern Arabs prior to Mohammed. It is true that the known Bedouin inscriptions of the pre-Mohammedan time, their number running up into the thousands, are all written in the one or the other variety of the "Himyaritic" script; nevertheless the Arabic language, the speech of the greater part of the Arabian peninsula, employed another and very different form of writing, certainly in the sixth century and doubtless earlier, though this is only a matter of conjecture. Hitherto, only two specimens of this pre-Islamic script have been known, namely the brief inscriptions of Zebed and Harran. A third has just now been added, see the publication by Littman of an inscription from Umm ij-Jimāl, a city lying south of the Syrian Bosra, in the *Zeitschrift für Semitistik*, Band 7, Heft 2 (end of 1929), pp. 197-204. Safaitic inscriptions were found at the same place, dating from approximately the same time. Two systems of writing the Arabic language existed side by side for a considerable period, each connected with a long and splendid history; but the history of the one was in the future, while that of the other was in the past. The one which had come up from the south was the sorry remnant of a dead civilization, and the Safaitic inscriptions mark its last appearance. The one which had come down from the north was destined to have a magnificent development, and, as the sacred script of the Koran and Islam, to cover the Mohammedan world from Spain and Morocco to China, and from the Black Sea to the Soudan.

The contrasting history of the two varieties of Arabic script used contemporaneously in the region of the upper Euphrates and southward can well be exhibited in partial tables of alphabets. The first table (Pl. LII), giving the first ten characters of the alphabet, shows a clear line of development in the eastern branch of the North-Semitic script, from

the Palmyrene (well represented at Dura) through the "Estrangelo" Syriac (employed in all the oldest manuscripts) and the Nabataean (always on the edge of the desert) to the classical Arabic. A remarkable specimen of old Syriac writing, antedating the oldest Estrangelo, was found at Dura in the campaign of 1929-30, as will eventually appear.

The second table (Pl. LIII), in two parts, shows the origin of the Safaitic script in the South-Arabian alphabet, with the Sabaean taken as typical. The first half contains some of the characters in which the identity of form is complete. In the second half of the table are shown a few of the letters in which there is more or less variation from the primitive type. The comparison is here made with the Ethiopic alphabet, also an offshoot of the South-Arabian, and generally identical with it. The Safaitic characters vary greatly, and are often very perplexing. Several excellent tables have been published in recent years, but these of course must deal with regularities, and cannot be burdened with merely sporadic forms and the vagaries of individuals. The identification of the more peculiar and rarer characters of the alphabet was a slow process, brought at last to completion by Professor Littmann, who has contributed more than any other toward the decipherment of the Safaitic and Thamudenic monuments.

The Safaitic inscriptions take their name from the Ṣafā desert, south-east of Damascus, although by far the most of them have been found in the Ruḥbe and the Ḥarra. They are numerous also in the Hauran, and are likely to appear at any point along the eastern border of central Syria. Until the Yale Expedition to Dura, none had been found as far north as Palmyra, and thus the occurrence of these few on the upper Euphrates considerably increases the known range. During the period covered by these monuments, from the third century to about the time of Mohammed, one very large nomadic tribe ranged over all the most northerly part of the Syrian desert. This was the tribe of Kalb, originally located in the extreme south of Arabia. Another important tribe, known both in Yemen and in the far north, is that of Ḍabba. The Dura inscriptions seem to contain mention of both these tribes.

The specimens of this writing which were uncovered in the excavations of the second campaign are eight in number. Three of them are clearly cut; three are only partially distinct, and two of these are not Safaitic, but Palmyrene, see S. 7 and S. 8, below; one is so indistinct as to be perfectly hopeless of decipherment; the eighth, said to be very

faintly recognizable, I have not yet seen. In general, the scrawls made by these half-civilized nomads afford an opportunity for guessing, especially when the surface of the rock is weathered, or when the author of the graffito draws his characters carelessly and invents convenient ligatures, convenient, that is, for him.

It sometimes happens that an inscription runs from left to right, rather than from right to left; and in like manner single characters are very frequently reversed. One of the specimens from Dura, No. S. 3, is an example. In many ways the would-be interpreter finds himself on uncertain ground. The language is genuinely Arabic, but makes almost the impression of a strange tongue. In Mohammedan inscriptions the proper names are pretty certain to be familiar or easily recognizable, and there are numerous formulae which are very widely employed. Here among these pre-Islamic nomads, on the contrary, the names are usually puzzling, and the long-familiar formulae, which had seemed inseparable from Arabic, do not appear at all. The most interesting single feature of the dialect is the form of the definite article, which is *ha* (thus resembling the Hebrew) instead of the classical *al*.

The following is an attempted decipherment of the few graffiti from Dura which thus far have been found and made possible of study.

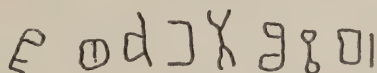


Fig. 25.

Facsimile of S. 1

לגתם את דר

*Of Guthām Abī Dawī.*

The reading is everywhere certain, for the characters are all very sharply cut. The name Guthām is already known. The interpretation of the remainder is uncertain; but as *dawi* ("stupid") is more than plausible as a proper name, it is perhaps not necessary to offer other conjectures. Following the characters is a tribal mark which has been found in other places; see Littmann, *Thamud. Inschriften*, Tafel XII.

S. 2 is on a stone which is described as very much weathered. Two drawings and a squeeze are available, but the drawings do not agree with each other nor with the squeeze, and it is impossible to make out anything legible.





Fig. 26.

Facsimile of S. 3

ܠܢܫܪܝܗܒ

This inscription is on the same stone as the following. The characters are very small (1–2 cm. in height) and in part difficult to make out. The last four are distinct. The first in the facsimile is probably not a letter at all; the squeeze testifies against it. Following the *nun* was probably *samech*, though the letter is now indistinct. We may plausibly read the proper name Nasr-yahab, "Nasr will give." We know from the *Doctrine of Addai*, ed. Phillips, p. 24 (Syriac text), lines 18 f., that Nasr ("eagle") was a god worshiped by the northern Arabs at about this time.

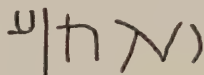


Fig. 27.

Facsimile of S. 4

ܪܫܐ ܕܠܒ

*The camel train of Kalb.*

The characters are large (2½–3 cm. in height) and clearly cut. The final letter is noticeably small, but can hardly be anything else than *beth*. Observe what was said, above, in regard to this tribe of Kalb.



Fig. 28.

Facsimile of S. 5

ܕܒܪܐ ܕܕܒܒܐ

*The camel train and the Bedouin. Dabba.*

The word ܕܒܪܐ, "bedouin," occurs in Dussaud, No. 174. In our inscription, if the interpretation is correct, the word would be *bādi*. The tribe of Dabba was mentioned above. The drawing of the inscription shows a small cross just above the last letter. It is not clearly to be seen in the squeeze, but may be a tribal mark. The letters of the inscription are all distinctly cut.



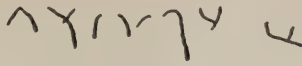


Fig. 29.

Facsimile of S. 7

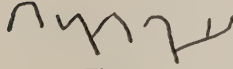


Fig. 30.

Facsimile of S. 8

These two inscriptions, though on stones widely distant from each other, contain the same name (Mr. Johnson, who copied them, had already noted this). After I had tried in vain to read them as Safaitic, Professor Littmann opened my eyes to the very obvious fact that they are Palmyrene scrawls; probably to be read 'Awīdhī. The name 'Awīdhā occurs frequently in Palmyrene inscriptions, but a form ending in *ī* or *ai* has not hitherto appeared.

## V

### TEXTILES

BY LILLIAN M. WILSON

THE pieces of cloth found during this year's work at Dura are fragmentary. They were in the towers of the Main Gate and in the Tower of the Palmyrene Temple. As these buildings were destroyed at some time between the years 260 and 272 A.D., none of the cloth can be later than the last mentioned date, and probably not earlier than the middle of that century (the third).

A variety of weaves are represented in the collection. Among the woolen pieces, the specimens of tapestry weaving predominate. The largest fragment, which is badly damaged and patched in several places, is a little more than 2.80 m. long, with an average width of about 0.90 m. One original corner, about 0.77 m. along one original end, and a considerable part of the selvage along the 2.80 m. of length are preserved. The end just mentioned is finished with a cord composed of the ends of the warp threads. About 0.025 m. from the end, there are two narrow stripes of red about 0.007 m. wide, separated by a wider stripe of the natural color. The cloth is tapestry woven throughout, and excepting the red stripes above mentioned, is of the natural color of the wool. While relatively heavy, it is soft and pliable. Its original size, and the purpose which it served can only be conjectured.

A small fragment, Pl. XVIII, 2, is of wool of natural color, tapestry woven throughout, with a purple band, 0.032 m. wide, which probably formed a part of a simple meander pattern, one angle only being preserved. The extreme length of each portion of the band is 0.125 m. At one corner of the piece, there is a small fragment which shows that the warp threads at that point turned at a right angle, necessitating a similar change in the direction of the weft. Another possible instance of a similar manipulation of the warp threads appears on another badly tattered fragment of tapestry weave. On a small fragment of coarser texture than Pl. XVIII, 2, there is a purple band, wider than that of Pl. XVIII, 2, but similarly disposed. An angle and about 0.025 m. of the band only are preserved.

Two pieces of heavy tapestry weave, both evidently from the same web, are of solid purple on black warps. There are a few shreds of a

black stripe along the edge of one of the pieces. The purple appears to have been, originally, one of the rich red shades.

Purple stripes of different widths and composition are the only decorative features, in the tapestry fragments, which are sufficiently preserved to be recognizable. On one fragment of fine, even texture, there is a broad purple band composed of three stripes, each 0.013 m. in width, separated by narrower stripes of the natural color of the wool.

Two pieces were found having a purple stripe of the style of that in Pl. XIX, 1. This stripe, which is 0.013 m. in width, is divided about 0.025 m. from the end, and a triangular pendant suspended from the point of division. At one side of the upper end of the preserved portion of the stripe, there is a small remnant of a purple figure, probably a medallion. This particular fragment is, apparently, a part of a tunic, the projection with the double stripe being a portion of one sleeve.

Another form of stripe found on several badly tattered pieces, is 0.075 m. in width. Four centimeters from the end, it is, in each case, divided in the same manner as the stripe of Pl. XIX, 1, but there is no pendant or other ornament.

The collection contains several pieces of twill weave of different styles. Pl. XX, 1 and 2, are the two sides of a piece of heavy cloth, evidently woven in broad stripes of purple and natural color. One side of the cloth (Pl. XX, 1) is a weft rib; the other (Pl. XX, 2) a twill (over two and under one). Another small fragment, but of soft fine wool, is of a weave similar to Pl. XX, but with a more complicated twill. There is one well-woven piece of regular twill (over two and under two) and several others of irregular twill. There are, also, three fragments of the type of Pl. XXI, 1. They are of coarse wool, yellowish in color; the weave, a regular twill.

A few pieces of a weave similar to loop weaving were found; see Pl. XXI, 2. This piece is of tapestry weave, but at intervals of about 0.013 m., a row of short heavy threads are inserted, weftwise, so that their ends cover one side of the web as do the loops in loop weaving. I think it was part of a short shaggy cloak worn by shepherds and appearing on sculptured figures of them of the third century, A.D.

Pl. XIX, 2, is a fragment of goat's hair carpet or saddle cloth of two natural colors—a stripe of dark brown 0.175 m. wide, and on either side of it, a tan colored stripe 0.057 m. wide with a border consisting of a narrow dark brown stripe parallel to a row of dark brown checkers.

Pl. XXI, 3, is a piece of carpet with short threads of red and green

laid at intervals so as to form a pattern, the nature of which cannot be determined from this small fragment.

A relatively large quantity of linen pieces was found, all of coarse texture; those of lighter weight were of simple or tabby weave, the heavier ones of basket weave.

In the collection there are two small fragments of felt of tan color. One of them (Pl. XVIII, 1) is 0.23 m.  $\times$  0.09 m. On its surface are two green stripes, varying in width from 3 mm. to 6 mm. There are also several pieces of cord of goat's hair and of vegetable fiber; and pieces of a heavy three-strand braid of goat's hair (0.013 m. wide) which resemble the cords and braids worn at the present time by the Arabs as girdles and as a part of their headdress.



## VI

### VICTORY ON A PAINTED PANEL FOUND AT DURA

BY M. I. ROSTOVTZEFF AND P. V. C. BAUR

IN the northeast room (Pl. II, H) of the north tower of the Palmyrene Gate two walls of sundried brick (d and e) had been built across the room to reduce the span of the beams of the ceiling. In (d) there was cut a small niche which seems to have contained a shrine of a local deity. That it was a shrine of the Tyche of Dura is made probable by the discovery in this room of a painted wooden panel (Frontispiece and Pl. I, 1) depicting Victory. It is one of two panels or wings of a little shrine dedicated to the goddess who is also elsewhere associated with Victory.<sup>1</sup> Indeed, not only this room but also the inner court of the Palmyrene Gate (Pl. II, D) must have been sacred to the Tyche of Dura, judging from the mass of inscriptions of men who either wished to be remembered by the deity, or who expressed their thanks to her.<sup>2</sup> The cult of Victory is also attested by scratched designs on an altar found in the inner court (D)<sup>3</sup> and the cult of Nemesis by a votive stele.<sup>4</sup> Upon Good Fortune depends Victory over the enemy and Vengeance upon the enemy.

The dimensions of the wooden panel—not counting the projections which fitted into sockets and served as hinges—are 0.366 m. by 0.12 m.; it is 0.01 m. thick. These dimensions also give us the approximate size of the shrine of which the two panels formed the wings. It must have been 0.24 m. broad and at least 0.366 m. high. If the cult statue of Tyche were of the standing type, like that on the Pompeian fresco depicting Venus Pompeiana in a chariot drawn by four elephants,<sup>5</sup> it would not fill the space. If, however, it were of the seated type invented by Eutychides for the Tyche of Antioch, it would fit in remarkably well. From the Roman provincial coins of Asia Minor we learn that this

<sup>1</sup> So, for example, on a coin from Tarsus, mentioned below. See also R. Peter in Roscher, *Lex.*, I, cols. 1540 and 1555 ff. (Drexler); Otto in Pauly-Wissowa, *Real-Encycl.*, s.v. *Fortuna*, cols. 41 f.

<sup>2</sup> See *Rep.* I, p. 41, C. 3, C. 8, and especially Rostovtzeff's remarks on p. 50, also Torrey's report, pp. 61 f.

<sup>3</sup> *Ibid.*, Pl. V, B.

<sup>4</sup> *Ibid.*, Pl. IV, 1.

<sup>5</sup> Mary H. Swindler, *Ancient Painting*, Fig. 584: Pfuhl, *Malerei und Zeichnung der Griechen*, III, Fig. 744 (Fortuna standing on a globe).

type was occasionally used also by other cities situated on rivers and at Dura we find a painted representation of the Tyche of Dura associated with the Tyche of Palmyra (Cumont, p. 97 and Atlas, Pl. L). In our shrine, then, the river god swimming at the feet of Tyche instead of being the Orontes would be the Euphrates. The geographical situation of Dura lends itself admirably to this type of Tyche.<sup>1</sup> The panels were painted on the inner side so that the Victories about to crown Tyche were visible when the doors were open. Otherwise the shrine was probably like a plain box.

The best analogies to wooden shrines with a door and a statuette or statue of a god inside of the shrine are presented by Egypt. From a very early period the statues of the gods in Egypt were kept in wooden or stone shrines of larger and smaller dimensions. In such shrines (the Greek term for it was *ναός*) the statues of the gods were carried in sacred processions, the shrines sometimes being placed on sacred barges.<sup>2</sup> The habit was still alive in the Greco-Roman period as is attested by some inventories of temples compiled for the Roman administration of which we still have some fragments (enumerated in the Introduction to *P. Oxy.*, 1449). In one of these fragmentary lists (*P. Oxy.*, 521, 2d century A.D.) in line 4 ff., we read: *ναῖς/κιον Ὀσείδ[ος . . .] / Ὀσείδος ξυλ[ . . . ξυ] / λοναίσκιον. Ναῖσκιον or ξυλοναίσκιον is the best name for the little shrine of Dura (cf. *B.G.U.* 387).*

Various were the images which were kept in such *ναίσκια* which of course were not cult shrines containing the statue of the main god and the statues of the *σύννασι θεοί*, but votive offerings of worshipers. Of such offerings, as in all the temples of Greece, careful lists were kept in all the sanctuaries of Egypt. The names of the gods who were kept in such shrines we learn from a large fragment of a list of offerings, *P. Oxy.* 1449 (213-17 A.D.), which enumerates the votive offerings in a set of temples and shrines of the city of Oxyrynchus and of its neighborhood. Most of the shrines were dedicated to Greek gods, one to Atargatis Bethennun[is ?]. Besides the priests the declaration was made by *κωμασταί προ[τομῶν τοῦ] κυρί[ο]υ Σεβαστοῦ καὶ Νίκης [αὐτοῦ προαγούσης καὶ] / Ἰουλίας*

<sup>1</sup> Small statuettes of a Tyche in the type of the Tyche of Antioch are frequent in our Museums, see F. Cumont, *Fouilles*, p. 99, note 1. Cf. the excellent statuette in the Metropolitan Museum of Art in New York, G. M. Richter, *Catalogue of Bronzes*, No. 259.

<sup>2</sup> G. Maspero, *Egyptian Archaeology*, 1884, pp. 104-105 and Fig. 109.

Δόμνας Σεβαστῆς καὶ τοῦ θ[εοῦ πατρὸς Σεβαστοῦ (?) Σεουήρου. . . . It is evident that all these shrines were centers of the imperial cult, and this impression is confirmed by the fact that in each list the first place among the votive statuettes of gods is occupied by the εἰκονίδιον of the reigning emperor and εἰκονίδια of his parents. The statuettes of gods are called ἀδριαντάρια and ξόανα.<sup>1</sup>

It is, therefore, equally possible to assume for our shrine not a statue of Tyche as its resident but a statue or bust of the reigning emperor. The great devotion paid by the inhabitants of Dura to Julia Domna (as attested by an altar found in the fall of 1930 at Dura) may suggest a statuette of Julia Domna represented as the Tyche of the city. I may draw the attention of the reader in this connection to an interesting bronze helmet found in the river Jordan in Palestine and now in the Museum of Berlin, Sammlung Lipperheide, No. 86 (Pl. XXIII). The photographs here illustrated are due to the kindness of Professor Zahn. The helmet<sup>2</sup> is adorned with a tendril (Ranke), then with a frieze of arms and weapons (trophies of vanquished Syrians and Anatolians ?) and finally with a medallion with a bust of Julia Domna represented as Tyche. The medallion is supported by two flying Victories.<sup>2</sup> If the bust of Julia Domna wears a breastplate, which we cannot see in the photograph and which we do not consider probable, her armor can be explained by the fact that she was the first to have the official title of mater Augusti et castrorum, and that would entitle her to appear in the dress of a goddess of war. To the right and left in a quadriga is a charioteer, the one, according to Zahn, certainly Poseidon, the other probably Helios with the kentron.

To come back to the shrine. It is natural that the figures of Victories should be painted inside of the door wings. It was quite a revelation.

<sup>1</sup> It is interesting to note that in most of the marriage contracts of Roman Egypt among the objects given to the bride as her dowry the place of honor is occupied by a bronze statuette of Aphrodite. This statuette was sometimes kept in a special box-shrine, see *C.P.R.* 27, 9: καὶ χαλκᾶ / [Ἀφρο]δείτην, etc., καὶ ξύλινα [ἐπιθή]κην τῆς Ἀφροδεί[της]. Wessely remarks that he has seen in the coll. Graf in Vienna a statuette of Aphrodite still in its epitheke.

<sup>2</sup> Illustrated in *Arch. Anz.*, 1905, p. 21. On p. 22 B. Schröder states that the bust wears armor, and that it is probably a portrait of an emperor. Cf. the painted grave of Aelia Arisvinth in Tripoli where two standing Victories hold a wreathed medallion containing a portrait of her in half figure. Above are two genii holding another wreath with the name of Aelia Arisvinth.



when the doors were opened and the deity crowned by Victories emerged from darkness in all her splendor. A curious parallel to our door wing painted inside is presented by a pair of such wings found in Egypt and now in the Museum of Berlin. To Professor A. Scharff our thanks are due for the photographs here reproduced (Pl. XXII). Here the image inside the shrine is met or greeted by a procession of gods painted on the door panels, all figures moving toward the image. They are no doubt the σύνναοι θεοί of the deity inside the shrine with the exception of the clean-shaven priest who is sacrificing at a thymiaterion. The gods march in pairs: the pair of the upper row on the left panel are a god and a goddess, in the second row two gods on each panel. All the gods, as far as recognizable carry either in the right or in the left hand a branch—greetings to the great deity inside the shrine. Each of them has beside the branch an attribute. All are young, without beards and mustaches and all are dressed in the same way: a tunic with purple straps, a pallium and high shoes for the gods—a long chiton and a chlamys for the goddess. The attributes are: in one case the double axe (first row, left panel, left), in another (the goddess next to the god with the axe) a dog or jackal held on a leash. If I am not mistaken the god to the left in the second row of the first panel also carries a double axe while his neighbor holds the reins of a camel. The three gods on the right panel have each of them a spear.

No doubt the set of gods is not Egyptian and not Greek. The double axe points to the border lands between Syria and Asia Minor and the general features of the gods and goddess again to the Syrian lands. The best parallels to these beardless juvenile warlike gods are presented no doubt by Palmyra, e.g., the interesting bas-relief of the gods 'Arsû and Azîzû now in the Museum of Damascus.<sup>1</sup> Here in the center we have the dedicant performing a sacrifice, to the left a triad of gods (?) or men with cups in their hands and a child seated on an altar (?), to the right the two gods 'Arsû and Azîzû, one on camelback, another on horseback. The gods are well-known Arab gods (see Ingholt, *op. cit.*). I call attention also to the well-known group of three or four gods of Palmyra all juvenile and beardless, or dressed in the military fashion.<sup>2</sup>

The double axe in the right hands of two of the gods points to Hadad,

<sup>1</sup> J. B. Chabot, *Choix d'inscriptions de Palmyre*, Pl. XXII, 1; H. Ingholt, *Studier over Palmyrensk Skulptur*, 1928, Pl. VII and pp. 42 ff.

<sup>2</sup> Chabot, *op. cit.*, Pl. XXIII, 2, and Cumont, *Fouilles*, pp. 100 ff.



the native Anatolian god who with his consort Atargatis found a new home and a gorgeous sanctuary first at Bambyke in Syria and then far and wide all over Syria in countless shrines (one discovered this year at Dura) and outside of Syria in all the Greek and Hellenized lands. One of these lands was Egypt. Here from the early Hellenistic period Atargatis and Hadad found an ever increasing number of worshippers.<sup>1</sup> Since Hadad is represented twice on our panels is it not fair to suggest that the ναϊόκιον to which our door wings belonged contained the statue of an oriental deity and was dedicated in one of the many shrines of the Syrian goddess or the Syrian goddesses in the Fayum?<sup>2</sup>

It is interesting to add to these parallels some well-known monuments which go back to the same ideas. I mean the typical triptychs which appear very often as adornments of the "mantelpieces," wooden cornices which run around a room in the Pompeian and Roman wall decorations of the second style. The same triptychs play an important part in the mystic cults of antiquity: by opening the doors of such a triptych the initiated saw the secret holy image of one or another of the mystic cults.<sup>3</sup> From these monuments both in Egypt and in Italy (and there is no doubt that they were widely spread all over the ancient world) there is not a long distance to the medieval triptychs and the medieval wooden shrines. With Syria directly (through China) we may connect the fact, that a similar arrangement of painted doors is

<sup>1</sup> U. Wilcken, *Zu den Syrischen Göttern* in *Festgabe für A. Deissmann*, 1927, pp. 1 ff. Note that in all the papyri which refer to the cult of Atargatis she is mentioned in the company of her σύνναοι θεοί. Note also that a well-preserved temple of Hadad and Atargatis was discovered at Delos (P. Roussel, *Delos colonie athénienne*, 1916, pp. 252 ff.).

<sup>2</sup> R. Pagenstecher (*Arch. Anz.*, 1919, cols. 9 ff., Figs. 1-2) first published these panels, but did not hit the mark. The sacrificing priest is not necessarily an Egyptian, and the other figures seem to us to be Syrian σύνναοι θεοί of the deity in the shrine. He was right in drawing attention to the relief in the Museum of Cairo (*Arch. Anz.*, col. 18, Fig. 3) and in identifying the seated figure of this relief as the occupant of the shrine. We, however, opine that the style of the Cairo relief is not Egyptian but Asiatic, and that with the exception of the priest who is pouring incense on a thymiaterion, the other figures—they are on a larger scale—are oriental deities. The enthroned deity with rayed head and scepter is to our mind an Asiatic form of the sun god, and the central figure, in the lower row, his consort whom the Greeks would have called Artemis. The god leading the camel, the goddess with the dog, and the warrior deities are the same as those of the panels, deities associated with the sun god. A similar wooden panel with painted figures is in a private collection in England.

<sup>3</sup> M. Rostovtzeff, *Mystic Italy*, 1928, p. 80 and Figs. XV and XXIV, 1.

met on a small Korean domestic altar with a group of three Buddhas, which dates from the first dynasty of the Kingdom of Silla.<sup>1</sup>

As we are not competent to give a technical description of the painting, we have asked Mr. Daniel V. Thompson of the Yale Art School for information. He has very kindly responded and writes as follows:

I cannot say definitely what the wood of the panel is: that calls for a special knowledge which I do not possess, and it would be useless for me to hazard a suggestion. The panel is covered with a thin couch of white, very absorbent, which seems to consist of white chalk bound with a minimum amount of size. The painting itself is executed in a sort of water color, or more properly *gouache*, for the proportion of binding medium is very low. This medium may have been albuminous; from the appearance of the colors and from their behaviour under such simple optical tests as I could apply without better laboratory facilities I am inclined, however, to believe that it was rather a vegetable gum, such as acacia or the cherry gum which Miss North used in her reconstruction. Pliny's *sarcocolla* must have been something of this sort.

Some of the pigments can be identified under the microscope, and their identification compels us to visualize the painting in its original state as very brilliant, even barbaric, in color. There are considerable areas in the picture which show remains of painting in orpiment. (You will remember that Pliny speaks of the use of *auripigmentum* as being confined pretty much to small works, and mentions moreover, XXXIII, 22, that it was imported from Asia Minor). Upon these areas, namely the borders or reverse of the gown, which have largely decayed, as not uncommonly happens when orpiment has been used, a simple design was painted in a red color which may well be "dragonsblood," a warm red resin which has a long history of usefulness for shading over bright yellow, known to the Romans by the confusing title of Indian cinnabar.

The background, now an indeterminate dark red, must originally have possessed a degree of brilliance compatible with that on the flaming borders of the gown. Under the microscope it shows itself to have been painted in a transparent red over an opaque one. The underlying color corresponds pretty much to our idea of the ancient *sinopis*, but from its intensity and tint I am inclined to judge that it may have been somewhat reinforced with red lead, and it was so that Miss North prepared the ground in her copy. This combination of rubric with false sandarac was known as *sandyx*, and sometimes served as an advance

<sup>1</sup> See Andreas Eckardt, *History of Korean Art*, translated by J. M. Kindersley, Pl. LXXVI, Fig. 232. The Kingdom of Silla began in 57 B.C., and ended in 935 A.D. The fact that such *naïskoi* occurred frequently in Syria is attested by the form of a *naïskos* or *naos* on some altars of Syria (Comte du Mesnil du Buisson, *Bull. d. Inst. de France*, 1928 [issued in 1930], p. 246, n. 3).

preparation for the purpurisum. (Cf. Pliny, XXXV, 26, 31). The overpainting here may be the true *murex* purple; but without fairly elaborate tests it is not possible to eliminate the possibility that it is a lake color of vegetable origin.

The painting of the flesh is carried out likewise in two tones: first a preparation which can hardly be other than green earth, *creta viridis*, mixed with the chalk white which alone seems to have been used for lightening the tints; and upon that a delicate shading with a mixed flesh-color. The features are emphasized by a double outline of red and black, and the whites of the eyes are heavily loaded with chalk.

The same green earth appears in the painting of the skirt and of the garland, but with the addition of a stronger green, probably the *aerugo* of Pliny, the universally popular verdigris, mixed with it and laid over it, for the deeper tones of the shadows.

The microscope confirmed Professor Rostovtzeff's acute surmise that the globe was painted in blue. Unmistakable remains of crystalline copper blue are to be seen within its outline. I hesitate to link this with the *armenium* of Pliny, since the identification of blue pigments, even when their precise nature has been determined, with the titles given them by classical authors, is necessarily somewhat uncertain, owing to the ambiguous terminology of the texts.

Victory on the globe first occurs on a statue dedicated by Augustus in the Curia Julia on August 28, 29 B.C., when the cult of Victory was established in commemoration of the battle of Actium. Above an altar soared the goddess on a globe. The statue is said to have been brought from Tarentum, but there is no evidence that it formed part of the spoil of Fabius and Marcellus when they captured that city in 209 B.C. The earliest illustration of this famous statue is on the coins of Augustus,<sup>1</sup> but the type frequently occurs on coins of the later emperors.<sup>2</sup>

We are, however, dependent not only on these coins for our knowledge of the appearance of the Victory in the Curia, for the type is also found on an intaglio of glass paste in the Berlin Museum. It dates from the early imperial period. Here her attributes are crown and trophy in-

<sup>1</sup> Cohen, *Med. Imp.*,<sup>2</sup> I, 72, No. 63, p. 107; Mattingly-Sydenham, *The Roman Imperial Coinage*, I, Pl. III, 60, a denarius struck by L. Pinarius Scarpus between 30 and 27 B.C. in Cyrenaica, and the coins struck by Vatronius Labeo and Rutilius Plancus as duumvirs of Corinth, *B. M. C. Corinth*, Pl. 15, 10.

<sup>2</sup> Bernhart, *Handbuch zur Münzkunde der römischen Kaiserzeit*, Pl. 72, 12 (Vespasian) and 16 (Carus), Pl. 81, 6 (Constantius II); Roscher, *Lex.*, III, 1, col. 354, No. 24 (Antoninus Pius); Mattingly-Sydenham, *op. cit.*, I, Pl. XII, 226 (Galba) to cite only a few examples.



stead of crown and palm branch.<sup>1</sup> Yet there can be no doubt that the statue in the Curia is meant, because the Victory on the globe is placed on an altar which is decorated with a Victory driving a chariot. On either side of the altar a barbarian in trousers is kneeling and holding aloft Roman standards, a representation which evidently refers to the return by the Parthians of the standards taken from Crassus. Judging from the sharp folds of the drapery the statue in the Curia Julia must have been of bronze. This is made certain by a Roman copy of the type found at Cirta and now in the Museum at Constantine.<sup>2</sup> Here, better than on the coins and the Berlin intaglio, it is clear that the Tarentine original belongs to the third century B.C.

Another type of Nike on a globe was invented by Niceratus in the first half of the second century B.C., but of this we have only a poor drawing.<sup>3</sup>

A third type of Victory on a globe, a type which cannot be connected in any way with that in the Curia Julia, is preserved to us in a gilded bronze statute of the middle of the third century A.D., found at Calvatone in the province of Cremona. It is now in the Berlin Museum.<sup>4</sup> On the globe is the inscription: *Victoriae Aug(ustae) Antonini et Veri M. Satrius Maior*. This statue would be of special interest to us if it could be proved that the inscription refers to the Parthian war (162-65 A.D.). Here it is evident that the Roman creator of this type of Victory is an eclectic artist who makes use of archaistic, Hellenistic, and Roman elements. He made his task easy by borrowing a type of Maenad which is preserved in a marble copy of the Villa Albani.<sup>5</sup> Victory wearing the skin of a panther is senseless; the artist did not take the pains to omit it when he turned a Maenad into a Victory merely by adding wings and changing the attributes. Note that the bare left leg projects from the

<sup>1</sup> Roscher, *Lex.*, III, 1, col. 354, Fig. 25. On the coins of Augustus the trophy is sometimes substituted for the palm branch, for example, Mattingly-Sydenham, *op. cit.*, I, Pl. II, 34.

<sup>2</sup> Doublet et Gauckler, *Musée de Constantine*, Pl. 8; *Revue archéol.*, 1890, Pl. 14; Roscher, *Lex.*, III, 1, col. 354, Fig. 26.

<sup>3</sup> Illustrated in Loewy, *Bildhauerinschriften*, 496. See also Bulle in Roscher, *Lex.*, III, 1, col. 349.

<sup>4</sup> Bruno Schröder, "Die Victoria von Calvatone," 67. *Winckelmannsprogramm* (1907), Pls. I-II; *Beschreibung der Antiken Skulpturen*, Berlin, 1891, No. 5; Kekule, *Die Griech. Skulptur*,<sup>2</sup> Berlin, 1907, p. 377; Ulrichs, *Annali dell' inst.*, XI, 1839, pp. 73 ff., tav.d'agg.B.

<sup>5</sup> Schröder, *op. cit.*, Pl. III.



slit in the Doric chiton, and that the right leg is crossed behind the left as she dances along on her toes instead of flying. Keep in mind that she does not look at the observer, but that her glance follows the attributes, no doubt a crown held in the outstretched right hand and a palm branch in the left.

We are now ready to discuss the painting of Victory found at Dura. In many respects it reminds us of the last mentioned Victory. Both wear a Doric chiton with high-girdled overfold on the painting, but with high-girdled panther's skin on the statue. Both have one leg bare and the other crossed behind it. On the painting, however, it is clear that the artist first drew the head and drapery and then added the arms and legs. The legs are altogether out of drawing, both being on the left side of the body. Another point of similarity is that both statue and painting have very long and slender bodies, but on the panel picture the structural element is entirely lacking. This lack of the structural element is characteristic of oriental art, especially noticeable in India, Chinese Turkestan, China, and Japan. This tradition dies hard; indeed, in the Japanese prints of modern times it is still very much alive. On statue and painting the wings are merely attributes; the Victories do not fly, but dance on the globe, barely touching it with their toes. On the statue the wings are restored, in the painting they are drawn much too small.

Very similar to both the Victory of Dura and to a certain extent to that of Calvatone are the Victories painted on the pillars of the famous painted grave of Palmyra (Pl. I, 2), so many times published and illustrated.<sup>1</sup> The general slenderness of the figures, the lack of struc-

<sup>1</sup> The best reproductions of the Victories may be found in J. Strzygowski, *Orient oder Rom*, 1901, pp. 11 ff.; B. V. Pharmakowsky, "Painting in Palmyra," *Bull. of the Russ. Arch. Inst. in Constantinople*, 8, 3 (1903) (in Russian) (Pl. XXIV, colored plate of one of the Victories); J. B. Chabot, *Choix d'inscriptions de Palmyre*, pp. 96 ff., Pls. XVII-XVIII (after the excellent photos of Rev. Père R. Savignac). Our photograph (Pl. I, 2) we owe to the courtesy of M. Chabot. That the prototype of this type of Victory belongs to the Hellenistic period is furthermore evident from a relief found in Augst, Switzerland, and published by Felix Stähelin, "Ein römisches Siegesdenkmal in Augst" in the *Anzeiger für schweizerische Altertumskunde*, 1930, I. Heft, Zürich, pp. 1 ff., illustrated Fig. 1 and Pl. I. In this article Stähelin collects other examples of the type. In this connection the Nike on a globe, a plaster relief found at Dura, should be mentioned (see Cumont, *Fouilles*, Atlas, Pl. LXXXII, 3). Cf. also the Victory on plaster reliefs, O. Rubensohn, *Aus dem Pelizaeus Museum zu Hildesheim, Hellenistisches Silbergerät in antiken Gipsabgüssen*, 1911, Pl. IV, 34 and Pl. XIV, 79.

tural element, the general composition of the flying figure with short, purely ornamental wings dancing on the globe, the peculiar treatment of the eyes (not adequately rendered in the colored plate of Pharmakowsky, much better on our Plate and on Pls. XVII and XVIII of Chabot)<sup>1</sup> and of the dress, especially of the flounces, the nude legs which emerge from the skirt are almost identical in the two pictures. Identical are the colors—bright green, white, flaming red, and dark blue. All these coincidences make the Victories of Palmyra the closest parallel to the Victory of Dura.

The Victories of Palmyra, however, show some important differences if compared with the Victory of Dura. They are more Hellenistic, less oriental. The colors of the Dura painting are more crude and flaming than those of the Palmyra paintings. The red and green predominate at Dura, while the neutral white is the main color of the Palmyra Victories. Note also that the Palmyra Victories have their hair dressed in the Hellenistic and not in the Parthian fashion and that they wear almost no jewels (perhaps two thin armlets on the upper parts of their arms).

Must we ascribe these differences to the fact that the two paintings belong to two different schools or to the fact that they belong to two different periods? The paintings of Palmyra are dated. As Professor Kokowzew has pointed out<sup>2</sup> the "adornment" of the southern painted exedra of the Palmyra grave according to the inscriptions was carried out between 160 A.D., the time of the inscriptions which speak of the construction of the grave, and 191 A.D., the time of the inscriptions which first mention the "adornment" of the exedra. Is our painting later and thus more oriental? This conclusion seems to us very little convincing. The third century in Dura was the time of Roman domination. *A priori* we would expect in this period a less strong influence of Parthian culture and art than in the preceding period, the time of Parthian domination. We are inclined, therefore, to date our painting in about the same time as the Palmyra frescoes and ascribe the differences in the two productions of pictorial art to the differences between two schools of painters: one—that of Dura—more Parthian, more oriental,

<sup>1</sup> The same treatment of the eyes may be observed in the figure of a flying genius in a painted grave of the Bosphorus, M. Rostovtzeff, *Ancient Decorative Painting*, Pl. LXXVI, 1.

<sup>2</sup> P. K. Kokowzew, *Bull. of the Russ. Arch. Inst. in Constantinople*, 8, 3 (1903), p. 321.

the other—that of Palmyra—more Greek, i.e., Hellenistic, though with very strong oriental, i.e., Parthian elements. To these remarks we may add that the scheme of two Victories supporting a medallion or crowning a statue or a bust while common all over the Greco-Roman world is especially common in the Near East. It is more than probable that this type of composition created the similar compositions in early Christian art.<sup>1</sup>

We may draw the attention of the reader in this connection to a bas-relief recently found at Beirut. It is a trivial composition: two Victories supporting a *tabella ansata* on which probably an inscription was either actually painted (and afterward faded) or was intended to be cut or painted. The Victory of this monument is similar to that of Palmyra. The wings, the dress, and the head are typical. The most interesting point about this Victory is, however, that she is a combination of a Nike and a Tyche, as is shown by the mural crown on her head, a Nikotychē as this divine being is sometimes called in the inscriptions.<sup>2</sup>

To sum up. The Dura Victory is no doubt a peculiar production of Parthian art. The Hellenistic elements, as pointed out above, are strong but not predominating. Take the head of the figure. The Victory from Calvatone follows the Greek tradition and has the head turned decidedly to one side, whereas the Victory from Dura follows the Iranian tradition with the typical frontality of the head. (The frontality of the Palmyra Victories is dictated not by any tradition, but by the scheme of composition.) The hairdress is characteristic of the Parthian fashion, a huge top-knot of hair bound with a fillet, and masses of hair covering the ears. Again characteristic of Iranian fashion is the profusion of jewelry which adorns our Victory, pearl armlets, bracelets, and anklets. There are long strings of pearls sewed on her wind-blown drapery, and even her sandals are tied with a string of pearls.<sup>3</sup>

<sup>1</sup> See M. Rostovtzeff, *Ancient Decorative Painting in S. Russia*, 1913, pp. 499 ff. (in Russian).

<sup>2</sup> See e.g., B. Saria, *Starinar* 3 (1925), p. 106: Νικοτύχη τῶδ' ἄγαλμα, etc. Cf. the goddess Τυχέπολις in one of the inscriptions of Opramoas *Inscr. gr. ad. r. R. p.*, III, 739, col. XIX, 1, 18. The combination of Tyche and Nemesis of which we spoke above is evident in an inscription of the same Opramoas, *ibid.*, col. XIX, 3. A good example of Athena Nikotychē has been found in a sanctuary of Apollo at Bulla Regia, Tunisia (see *Arch. Anz.*, 1908, col. 221, Fig. 7).

<sup>3</sup> There are very few monuments of Parthian art in general and still less of those which represent a woman. A good survey will be found in F. Sarre, *Die Kunst des Alten Persien*, 1923, Pls. 54, 66. The typical hairdress of our painting is, however,



The position of the arms of the Victory in the painting—they are altogether out of drawing—differs from that in the statue of Calvatone in that the right arm crosses the body, so that the attributes, wreath and palm branch, the usual symbols of Victory, may be presented to the statue of Tyche in the shrine. Similarly on a bronze medallion of Tribonianus Gallus struck at Tarsus in the province of Cilicia, Nike is flying toward Tyche seated on a rock and is about to crown her, but the best analogy is found on the coins of Nisibis where the seated Tyche is represented in a shrine of which the panel doors stand open.<sup>1</sup>

not seen on any of the few figures of women illustrated in the plates of Sarre. On our Pl. XXIV, 3, is reproduced a terra cotta of the Museum of Berlin which shows a woman on horseback with exactly the same hairdress. Similar figures of women are reproduced on bone plaques which once adorned a toilet-box and were found in Olbia, B. V. Pharmakovsky, "Olbia," 1901-8, *Bull. of the Arch. Comm.* 33 (1909), p. 134, Figs. 60-65; *Arch. Anz.*, 1907, cols. 147-152. A bone plaque similar to those at Olbia represents a figure of a standing woman in a peculiar high hairdress, somewhat similar to a mural crown, holding in her right hand a diadem or the typical ring with taeniae, symbol of the royal power of the Sassanian kings. The figure though not winged is similar to the Hvareno of the bas-relief of Tag-i-bustan, Sarre, *Die Kunst des Alt. Persien*, Pl. 91. On her neck is a necklace, in the ears are earrings (B. et V. Channenکو, *Ant. de la region du Dniepr*, VI (1907), Pl. IV, No. 551). Similar plaques were found in India, one was found at Taxila (Sir John Marshall, *Ann. Rep.*, 1915-16, Pl. IX, Fig. 2 in *Arch. Survey of India*), another found in India is now in the Boston Museum of Fine Arts, A. K. Coomaraswamy, "Archaic Indian Terracottas," *Ipek*, 1928, Pl. 6, No. 38. I have seen figures of women with the same hairdress in the interesting frescoes of Parthian times from Kōh-i-Khwaja in Seistan which were first discovered by Sir Aurel Stein and now excavated and carried to Berlin by Professor Herzfeld. We are looking with great expectation to the publication of these frescoes. Interesting figures of the same type from Assur will be seen published by Professor W. Andrae.

<sup>1</sup> A. E. Cahn, *Auktions Katalog* 60, Pl. 26, 1710; *B. M. C.*, Cilicia, 315; Head, *Hist. Num.*,<sup>2</sup> p. 732. The Tyche of the Antioch type is found frequently on Roman imperial coins of Syria and on almost all the coins of Mesopotamia, e.g., Germanicia Caesarea, Head, *H. N.*,<sup>2</sup> p. 776; *B. M. C.*, Galatia, etc., Pl. XVI, 1; Laodicea ad mare, *B. M. C.*, Pl. XXXI, 3; Samosata on the Euphrates, Head, 776, *B. M. C.*, Pl. XVI, 10; Apameia on the Orontes, Head, 780; Damascus, Head, 784; Edessa, Hill, *B. M. C.*, Mesopotamia, Pls. XIV-XVI; Singara, Hill, *B. M. C.*, XIX, 3. At Nisibis we even find the seated Tyche in a shrine of which the panel doors stand open (Hill, *B. M. C.*, Pl. XVII, 12), and perhaps our panel came from an imitation of such a shrine. On the other hand, the standing type of Tyche is found on the coins of Heliopolis (Baalbek), on each side a standing figure and on columns stand two Victories holding a veil over her head (*B. M. C.*, Galatia, etc., Pl. XXXVI, 10). A statuette of Jupiter Heliopolitanus found at Beirut: the front, below the figures of the Tyche of Baalbek and a male



Miss North is doubtless right in her restoration of the original colors of the picture, in which Tyrian purple, green and white tints are glaringly set side by side without blending. As in the earliest known Nike of the sixth century B.C., the one found at Delos, perhaps the work of Archermos, so also here in the Victory of the second century A.D., the brilliant colors must have thrilled the hearts of the observer, and suggested the joy of some victory of long ago.

is the Tyche of Berytus crowned by a Victory as on the coins (Comte du Buisson, *Bull. d. Inst. de France*, 1928, p. 245).

## VII

### GRAFFITI SHOWING PARTHIAN WARRIORS

BY M. I. ROSTOVTZEFF

A GROUP of graffiti, of which one was found in the Temple of the Palmyrene Gods, three in the graffiti house mentioned by Mr. Johnson (above, p. 161) in his chapter on the horoscope, have an unusual interest and require a special discussion. Similar, but much cruder graffiti were discovered and discussed by Cumont (*Fouilles*, p. 265, Pl. 98) and have been compared by Cumont with a bas-relief showing a Parthian officer (Pl. 99, 1) and a scratched design on a stone plaque showing probably a Parthian or early Sassanian king (Pl. 99, 2).

Our graffiti are more correct in design, more elegant, less clumsy, in this comparable to a certain extent to Cumont's picture of the king and to some designs in black on a large jar found at Assur, soon to be published by Professor W. Andrae. Two of these graffiti represent Parthian horsemen charging an enemy; one is drawn as if the horseman was attacking a fortress on a mound (the connection between the two drawings, however, is probably accidental). One shows a Parthian standing over a large head. I will show that this connection is possibly not accidental. And the third, a fragment, shows a Parthian officer in front view probably on horseback.

I will not repeat the description of the Parthian bowmen as given by Cumont. It is correct and fits admirably the two bowmen reproduced in Pls. XLI, 2, and XLIII, 2, one riding to the left, another to the right, both shooting an arrow. In some details our drawings give more than the graffiti of Cumont. The wooden arrow-case is represented in our graffiti with all the details, even the thumb-ring used in drawing the bow (see above, pp. 73 f.) seems to be depicted. A torc—typical for the Iranians in general—is drawn on the neck of the bowmen and the hairdress is very well reproduced—the same hairdress which was described in the chapter on the Victory of Dura. There is no doubt that the rider (Cumont, Pl. 98, 1), wears no helmet but the same peculiar Parthian hairdress.

Our graffiti if compared with the terra cottas which represent both Parthians and Scythians,<sup>1</sup> illustrate in an excellent way the well-known

<sup>1</sup> F. Sarre, *Kunst d. Alten Persien*, Pl. 54 (to the left a Scythian, cf. my *Iranians*

description of the Parthian general Surenas and his army by Plutarch (Crassus 24). Surenas is shown in this description as dressed in the Parthian way: Μηδικώτερον ἐσκευασμένος ἐντρίμμασι προσώπου (painted face) καὶ κόμης διακρίσει (parted hair) τῶν ἄλλων Πάρθων ἔτι Σκυθικῶς ἐπὶ τὸ φοβερόν τῳ ἀνασίλλῳ κομώντων. The interpretation of this text is difficult. Have we to recognize in the hairdress of Surenas the elaborate hairdress of some portraits of Parthian kings on the coins (Sarre, *op. cit.*, Pl. 66) and the hairdress of our Pl. XLI, 2, and of Cumont, Pl. 99, 1, and in the hairdress of the majority of the Parthians with their hair "bunched over their foreheads" the hairdress so typical for the Parthians both male and female and illustrated beside our figures both by the painting of the Victory and by some Parthian terra cottas reproduced on Pls. XXIV, 3, and XXV, 1, 2? Or is it that the Scythian-like hairdress of the majority is of the type so well known from the figures of the Scythians as represented in S. Russian monuments? The same Scythian hairdress is seen on some terra cottas (e.g., Sarre, *op. cit.*, Pl. 54, 2). In this case the hairdress in the shape of three masses of trimmed hair distributed in a skilled manner around the face would be the hairdress of Surenas. Further discoveries in Dura will no doubt clear up this question.

The graffiti of Dura are a welcome illustration to another well-known classical text dealing with the Parthians. I mean Cass. Dio XL, 15:

τῇ δὲ δὴ ὀπλίσει καὶ τῇ τῶν πολέμων διαχειρίσει. . . τοιαῦδε χρώνται ἀσπίδι μὲν οὐδὲν νομίζουσιν, ἵπποτοξόται δὲ καὶ κοντοφόροι, τὰ πολλὰ κατάφρακτοί, στρατεύονται πεζοί τε ὀλίγοι μὲν καὶ οἱ ἀσθενέστεροι, τοξόται δ' οὖν καὶ ἐκεῖνοι πάντες εἰσίν.

"The Parthians make no use of a shield, but their forces consist of mounted archers and pikemen, mostly in full armor. Their infantry is small, made up of the weaker men; but even these are all archers." The Parthians of our Pls. XLI, 2, and XLIII, 2, are no doubt ἵπποτοξόται (cf. Arr. Ἀλανική, Jacoby, *F. Gr. Hist.*, II, B, 156 F. 12, 1—the Petraeans are characterized here as hippotoxotai, cf. Τέχνη τακτική, 44)—mounted archers, the sagittarii of the Roman imperial army, who were recruited in Syria. They wear no heavy armor and correspondingly are not the clibanarii or cataphractarii, i.e., the mounted spearmen with their heavy armor which covered both men and horses described by Cassius Dio. It must be noted that in the few monuments of

and Greeks, Pl. I, 1—cf. E. H. Minns, *Cambr. Anc. Hist.*, vol. of plates I, 248c—to the right a Parthian). Cf. our Pl. XXIV.

Parthian art I never saw such a *clibanarius* represented in sculpture and painting. Note that according to Plutarch (Crassus, 21, cf. Just., XLI, 2) there were very few such heavily armed knights in the Parthian armies and those were exclusively members of the Parthian aristocracy, while the majority were light armed *sagittarii*, serfs of the few Parthian nobles. These last probably are the two horsemen of our graffiti. If we want to form an idea on the general appearance of the *catafractarii* of the Parthian army we must recur to the monuments which represent the Sarmatians of S. Russia and the Danube lands. I mean some frescoes and bas-reliefs of S. Russia and some parts of the Roman triumphal compositions, especially some scenes among the reliefs of the Column of Trajan.<sup>1</sup>

We may be inclined to recognize one of the few *πεζοί* foot soldiers as described in Cassius Dio in our Pl. XLII, 1. However, the figure does not fit into the description of Dio. Dio says expressly that there were but few foot soldiers and all of them bowmen. Our man is, however, not a bowman. He stands in frontal view clad in a leather or metal armor, over which is thrown a mantle with tassels, a kind of plaid. The lower part of the armor has the shape of a skirt. He wears trousers of baggy character and high shoes. In the right hand he holds a heavy spear, the left hand grasps the hilt of his long sword. On his head is a peculiar helmet identical with the helmet of the Parthian king of Cumont (Pl. 99, 2) and the helmets worn by some Parthian kings on their coin-portraits, especially by Mithradates II (*Br. Mus. Cat. Parthia*, Pl. VIII, 1-9), Sinatruces (*ibid.*, Pl. X, 1-7), Phraates III (Pl. XI), and later after a long interruption by Vardanes II (?) (Pl. XXIX, 15-18), Pacorus II (Pl. XXXI, 1-4), Volagases II (Pl. XXXII, 6-14 and

<sup>1</sup> M. Rostovtzeff, *Ancient Decorative Painting in S. Russia*, 1913, p. 309, esp., pp. 328 ff. and 339 ff., *Atlas*, Pls. 78-79; W. Ginters, *Das Schwert der Skythen und der Sarmaten*, 1928, pp. 75 ff. The terra cotta figurine of a reclining Parthian (?) found at Warka and published by W. K. Loftus, *Travels and Researches in Chaldaea and Susiana*, p. 213, represents according to the description and drawing of Loftus a Parthian *clibanarius* in full heavy armor and a conic helmet. The statuette is now in the British Museum. I owe to the kindness of Messrs. H. R. Hall and C. J. Gadd of the British Museum a photograph of this statuette which I reproduce on Pl. XXV, 3. The statuette is a trivial funerary terra cotta. The reclining man wears no helmet on his head and in my opinion no armor. What Loftus mistook for armor is the shirt of the man, his trousers and his shoes. However, I may be mistaken and I leave the judgment to my readers.



XXXIII, 1-4) and Vologases III (Pl. XXXIV).<sup>1</sup> The helmet is a so-called "Spangenhelm," no doubt borrowed by the Parthians from the Sarmatians or common to the Parthians and the Sarmatians. I have described the structure of this type of a helmet which is common in S. Russia in the Sarmatized kingdom of Bosphorus in my book on the Decorative Painting in S. Russia.<sup>2</sup> I cannot dwell at length on the "Spangenhelm" which is no doubt of eastern origin and was used extensively in Europe in the period of migrations and of the early Middle Ages.

Note also that our man does not wear a beard as is usual on the coin-portraits of the Parthian kings, but only a long mustache like the Sarmatians and some of the Kushan kings. In this he is like some (very few) of the Parthian kings. There is a striking coincidence between our warrior and the coins ascribed to Vardanes II (without stringent proofs) of which some are reproduced in *Br. Mus. Cat. Parthia*, Pl. XXIX, 15-18. The head of the king on the coins is in front view, the king wears no beard, only a mustache, his head is covered by a helmet and two bunches of hair are seen to the right and left of his head.<sup>3</sup> I would be very much surprised if our graffito did not represent either the king of the so-called Vardanes II coins himself or one of his kin.<sup>4</sup>

No doubt the man of our graffito is not a common soldier: the armor, the spear, the sword, the helmet show that he belongs to the class of the ἐλεύθεροι of which I speak below in my comments to Dura, Parchment X. He stands on a large head of a beardless man. The head was drawn after the figure of the Parthian was ready, and may have nothing to do with it—just two separate sketches. However, we must realize that the Parthians liked very much the reproduction of heads without bodies,

<sup>1</sup> In studying the coins I came to the conclusion that the king of Cumont's graffito cannot be anybody but Volagases III (*Br. Mus. Cat. Parthia*, Pl. XXXIV, 8 and 9). Cf. the peculiar Kushan coins so similar in style and attributes and probably of the same date. E. Herzfeld, *Paikuli*, p. 48, Figs. 21 and 22.

<sup>2</sup> M. Rostovtzeff, *op. cit.*, p. 338. The type of the Sarmatian helmets is exactly the same as that of the Kushans in India, A. Foucher, *L'art greco-Bouddhique de Gandhara* II, Pl. V, 15-20.

<sup>3</sup> The head is very like some of the Gandhara sculptures and some of the portraits of the Kushan kings in India. See e.g. the portrait of Kanishka on the casket of Peshawar, A. Foucher, *op. cit.*, II, Pl. VI, and some statues which represent kings and nobles, *ibid.*, p. 176 ff., and Figs. 392-397.

<sup>4</sup> The head of the so-called Vardanes II looks very un-Parthian. Does it not represent one of the usurpers of non-Parthian origin, a man from Bactria akin to the Kushans and the Sarmatians? In this case the warrior of our graffito should be interpreted also as a noble soldier of foreign origin.

perhaps cut-off heads. The habit of cutting off heads of slain enemies was widely spread in Central Asia, among the Iranian and Mongolian nomads and half nomads, and is still in full use in Tibet among the nomads. The same nomads of Tibet like the Scythians of S. Russia as described by Herodotus still make cups of the skulls of their slain enemies. The habit is of very early date. One of the earliest sculptures of the Hittites (E. Meyer, *Reich und Kultur der Chetiter*, 1914, p. 60, Fig. 48) shows a man on horseback holding in his right hand the cut-off head of an enemy. I have dealt with this habit of the Central Asiatic nomads elsewhere<sup>1</sup> and I am not going to repeat my discussion here. I may, however, quote the well-known story of Crassus' head and the less-known description of the sham triumph of Crassus organized by Surenas at Seleukeia by Plutarch (Crassus 32); a Roman captive in woman's dress disguised as Crassus rode on horseback: *πρὸ αὐτοῦ δὲ σαλπικταὶ καὶ ῥαβδοῦχοί τινες ὀχοῦμενοι καμήλοις ἤλαυνον· ἐξήρτητο δὲ τῶν ῥάβδων βαλάντια καὶ παρὰ τοὺς πελέκεις πρόσφατοι κεφαλαὶ Ῥωμαίων ἀποτεμνημένα.* It is not impossible that the head of the graffito may be connected with these customs and habits of the Parthians.

The date of our graffiti is not easy to define. I doubt very much that all of them must be later than the date of the horoscope. Graffiti are not scratched all at once on the wet stucco. They are made one after another as occasion arises. To scratch them by means of a sharp knife or stylus is an easy thing. Such are at least the graffiti at Pompeii, and such they are at Dura. Our graffiti of the Parthians may therefore be earlier or later than the horoscope. I would rather suggest earlier. It is not impossible of course that our graffiti were done by the residents of Dura when the Parthians left the city. Their portraits were in this case drawn either by their enemies, the soldiers of the Roman army, or by those who used to be their subjects. However, it is perhaps more probable to suppose that in our graffiti we have the Parthians "peints par eux mêmes," perhaps in the last years of their domination, after the acute conflicts between the Romans and the Parthians which started with Trajan.<sup>2</sup>

<sup>1</sup> M. Rostovtzeff, "The Middle-Asiatic Hero and His Exploits," *Artibus Asiae*, 1930.

<sup>2</sup> If my comparison of the standing warrior with the portraits of Vardanes II is correct the date of the graffito must be about 55 A.D. However, we do not know whether the so-called coins of Vardanes II are not of a later date, and I have suggested the possibility that the warrior of our graffito is not a hundred per cent Parthian, but represents one of the many Iranian peoples which formed the Parthian feudal Empire.

Whether the Parthian officer in his jacket with the usual front strap, probably of leather with stamped or pressed ornaments, of the Temple of the Palmyrene Gods (*Yale Bull.*, Feb. 1930, p. 80, Fig. 5), is earlier or later than the graffiti described above is difficult to say. Nor am I able to explain the figure. Is the man represented on horseback or seated on a chair or a throne? Who knows?

I may say a few words on the "art" of the graffiti. Scratches as they are, sketches drawn by laymen not by professional painters, they show the same peculiarities as the work of the professional painters. The same frontality, the same slim, elegant figures of men and animals (see the figure of the lion (Pl. XLII, 2),<sup>1</sup> the same tendency of representing movement in the ancient traditional schemes of the Iranians ("galop volant" of the horses) and with a certain brio, the same minuteness in rendering the details of costume and hairdress. Only one of the graffiti (Pl. XLIII, 1) does not show the man in front view. If the authors of our graffiti are not professional painters or sculptors and the graffiti in the houses not sketches for frescoes or bas-reliefs later to be carried out, the graffiti are witness to a respectable artistic culture enjoyed by the mass of the population of Dura.

As material for comparison I am reproducing here on Pls. XXIV, 1-3, and XXV, 1-2, some terra cottas which represent Syro-Parthian horsemen. One (Pl. XXV, 1) in the Louvre in Paris, from a photograph kindly supplied by R. Dussaud, has almost exactly the same shape as a similar terra cotta of the Berlin Museum (Sarre, *op. cit.*, Pl. 54, 2). It looks as if such terra cottas were used for adorning the two sides of an upper part of a miniature arched gate. Note the hairdress of the rider and especially the horse accoutrements. The pectoral strap with rosettes shows survivals of similar pieces in Assyrian horse-trappings and recurs in India. A somewhat similar figure comes from the museum at Nicosia, Cyprus, through the courtesy of the director (Pl. XXV, 2).

Another terra cotta (Pl. XXIV, 3) is now in the Kaiser Friedrich Museum. I owe the permission to publish it to the kindness of Professor Sarre. It shows a figure with the peculiar Parthian hairdress on horseback. It is, no doubt, a man, not a woman. It is interesting to compare this terra cotta with the two little clay statuettes originally painted in

<sup>1</sup> This figure ought to be compared with the lion painted in the so-called Stassov catacomb in Kertch; see my *Ancient Decorative Painting in S. Russia*, Pl. LXXVI, 1 and LXXVII, 1.



bright colors (some remains may be seen in the originals) of undoubtedly Parthian style if not workmanship found in Palestine and now in the Semitic Museum of Harvard University (Pl. XXIV, 1 and 2). I owe permission to publish these statuettes to the kindness of Professor David G. Lyon, director of the Museum. One of these statuettes (0.12 m. high, 0.029 m. thick, 0.086 m. long) represents a warrior on horse-back wearing a conic "mitra" or helmet. The front of this mitra is adorned with a disk (?). The rider wears an armor of the Roman type with a broad belt, a cloak over his shoulders, trousers, soft shoes, and heavy armlets; on the neck perhaps a torc. The little lively horse wears apparently bracelets on its ankles. The second statuette (0.116 m. high, 0.027 m. thick, 0.09 m. long) also represents a human figure on horse-back. The figure represents certainly a man. His dress is probably not an armor: a leather jacket, a belt, trousers, and soft shoes. On the neck are two necklaces, on the right arm a thick armlet, in the left a circular shield. The dress, the arms, especially the helmet, and the jewels of the two statuettes speak of a strong Iranian influence and to the same Iranian influence point the style (especially the treatment of the eyes and of the hair) and the composition (the typical Parthian frontality).

The last three terra cottas represent, no doubt, gods, not men. The Berlin statuette and the second statuette of Harvard, to which may be added the statuette of the Ashmolean Museum published by myself,<sup>1</sup> show a remarkable similarity to the images of the Syro-Parthian god Genneas, as reproduced on three bas-reliefs, one in the Louvre and the other two in Syria (one in the collection G. Poche, the other in that of F. Marcopoli) which have been recently published and discussed by P. René Mouterde.<sup>2</sup> M. Mouterde has pointed out the remarkable similarity of these figures, in style and costume, to the Palmyrene sculptures. I may add that in the mixed Irano-Syrian style the Iranian element prevails. I have no doubts either that the religious ideas which are reflected in the god Genneas are not only Syrian and Anatolian, as M. Mouterde rightly suggests, but to a large extent Irano-Anatolian as well.

<sup>1</sup> M. Rostovtzeff, *Iranians and Greeks*, Pl. I, 2.

<sup>2</sup> P. René Mouterde, "Dieux cavaliers de la région d'Alep," *Mélanges de l'Université Saint Joseph*, 11 (1926), pp. 314 ff., Pl. II and Fig. 1 on p. 314. The one in the Louvre is illustrated in Cumont, *Fouilles*, p. 271, Fig. 60. Cf. S. Ronzevalle S. J., "Helioseiros," *Aréthuse* 26 (1930), pp. 6 ff. Cf. the Sarmatian phalarae Drexel, *Strena Buliciana*, pp. 58 ff., Figs. 6-8 and M. Rostovtzeff, *Recueil N. P. Kondakov*, 1926, pp. 239 ff.



## VIII

### PARCHMENT NO. X. A CONTRACT OF LOAN OF 121 A.D.

BY M. I. ROSTOVTZEFF AND C. BRADFORD WELLES

THE parchment<sup>1</sup> was found by the Yale Expedition to Dura on February 12, 1929, under the *débris* in the southwest tower of the Palmyrene Gate. It had been folded three times from the top, making a package 170 mm. long and 21 mm. wide; whether this folding represents the original condition cannot be determined. It is tempting to think that it may first have been rolled, as the size of the package and certain other considerations suggest that it may have been encased in a clay *bullā*. When unfolded, the package disclosed a rectangular sheet of parchment, 170 mm. long by 60 mm. wide, with fairly regular edges, and almost entirely covered with writing (Pl. XXVIII). On the left side, there may be said to be a margin of 2 mm.; on the top and the right, there is practically no margin at all, as the text runs as close to the edge as possible. The writing runs the long way of the document, and comes to the end in the middle of a line, 50 mm. from the left edge, and approximately 8 mm. from the bottom. The document is complete save for one large and several small holes, the former at least caused by burning; the heat caused the parchment around the hole to shrivel, making decipherment difficult in places. The parchment is of an excellent quality, and rather thick. It took the ink well, save for one spot in line 6 where there is a gap of 5 mm. between ἀρ and γυρίου, and probably in the line below; elsewhere there may, in a few cases, have been similar flaws where now there are small holes (as in line 11, between φύ and γη).

The writing is of much paleographical interest. It is the product of a highly skilled scribe, trained in a style similar to some Egyptian hands but with strongly marked individual traits. It is of a semi-uncial type; connecting strokes are employed extensively and the shape of individual letters varies considerably depending on the neighboring letters, without actually departing far from the ideal shape. The accompanying Alphabet Table (Pl. XXVII) is an attempt to show this graphically.

<sup>1</sup> The following narrative is a condensation of the full discussion of the parchment which is now being published in Volume II of the *Yale Classical Studies*. Only such references are here introduced as seemed essential. The same abstract in a slightly larger form was presented to the Académie des Inscriptions of Paris and is printed in the *Comptes rendus* of this Institution for 1930.

The letters are very small, and the lines are very close together; although the number of letters in a line varies from 87 in line 3 to 106 in line 16, the average, 98, is well over one letter to every 2 mm. and the 22 lines of the document occupy, in height, a space of hardly more than 50 mm. As may be seen from the Table, the shapes of many groups of letters are almost identical: this has made the interpretation of even well-preserved passages, as line 12 at the end and the names of the witnesses in lines 21 and 22, quite baffling. There is often little to distinguish, for example, α, δ, and in some connections ο; τ, γ, even σ and ι; η and ν. The letters β, ε, θ, φ, α, and sometimes ι project above the line, while φ, ρ, and rarely ι drop below it.

The Greek of the contract is excellent, and while the matter is technical, the manner suggests a good classical training on the part of the scribe. The grammar is correct: assimilation as in ὦν ἂν ἐπικτήσῃται ἄλλων (line 18) is practiced by the best writers. In the handling of the silent ι, the scribe is perfectly consistent: he attaches it to every dative, as ἔκτῃ (line 2). Βαρλάαι (line 5), and κυρίωι (line 7); he omits it in every subjunctive, as ἀσθενήσῃ (line 10) and ἀποδῶ (line 14). Such a practice must be based on some sort of false analogy, rather than on phonological confusion. The forms are Attic, with few exceptions. In προστασσομένα (line 8), we have the σσ of the Koine, and the dative of the noun Φραάτης, declined otherwise correctly, is always Φραάτει instead of Φραάτῃ (as in Plut. *Antonius*, 40); this last is better explained as confusion with the declension of *s* stem nouns than as a shortening of the long diphthong. The words ἐάν and ἂν are distinguished throughout. A remarkable feature of the text is the careful avoidance of sandhi, not only between words (nothing of the sort τῇμ πόλιν), but also within words, as συναπαρμένων (line 7) and the thrice repeated συγγραφήν (lines 17, 19, and 21). Elision is written only once, ἐπ' εἰκάδι (line 2). There is no appreciable attempt to avoid hiatus.

*Parchment No. X, 121 A.D.*

1. Βασιλεῦντος βασιλέως βασιλέων Ἀρσάκου εὐεργέτου δικαίου ἐπιφανοῦς καὶ φιλέλληρος, ἔτους ΗΞΤ ὡς ὁ βασιλεὺς βασιλ[έ -]
  2. ων, ὡς δὲ πρότερον Β[ΔΥ], μηνὸς Δαισίου ἔκτῃ ἐπ' εἰκάδι, ἐν Παλίγαι κώμῃ τῆς περὶ Ἰδράαν ὑπαρχείας, ἐπὶ Μιττολβαίσου Μην[ῶ]
  3. τῶν [πα]ρὰ τοῦ Μηναρναίου, φ[ρουρά]ρχου καὶ τῶν πρώτων καὶ προτιμωμένων φίλων καὶ τῶν σωματοφυλάκων, καὶ τ[ῶν]
1. βασιλέων read by A. M. Harmon.
  3. τῶν[πα]ρὰ, read by Harmon.

4. ὑπογ[εγρα]μμένων μαρ[τύρ]ων· ἐ[δάν]εισεν Φραάτης εὐνούχος ἀρκαπάτης, τῶν παρὰ Μανήσου τοῦ Φραάτου τῶν βατῆσα καὶ τ[ῶν . ?]
5. . . . . [.]ρων, παρ[αλή]πτου καὶ στρατηγού Μεσσοποταμίας καὶ Παραποταμίας καὶ ἀραβάρχου, Βαρλάαι Θεθαίου τοῦ Ἀβλαίου, τῶν [ . . . ]
6. [ . . . ]. . [ἐ]ν Παλίγαι κώμῃ[ι . . . . . ]-[.]χάρακι, ἀργυρίου καλοῦ Τυρίου κόμμα-τος δραχμᾶς τετρακοσίας, ἐπὶ ὑποθήκῃ τοῖς
7. [ὑπάρχου]σιν αὐτῷ [ . . . . . ]εἰ . [ . . . ] ἔσται παρὰ τῷ κυρίῳ. ἀντὶ δὲ τῶν τόκων τοῦ αὐτοῦ ἀργυρίου συνπαρ[α-]
8. [μένων] ὁ Βαρλάας τῷ[ι Φραάτει μέχρι τοῦ τῆς ἀποδόσεως] χρόνου παρέξεται αὐτῷ δουλικὰς χρείας, ποιῶν τὰ προστασσόμεν[α]
9. [αὐτῷ πάντα, οὐ γιγνόμενος ἀφήμερος οὔτε ἀπόκοιτος ἄνευ τ]ῆς τοῦ Φραάτου γνώμης· ἐὰν δὲ ἀφημερεύσῃ ἢ ἀποκοιτήσ[ῃ] ἀπὸ τοῦ Φραάτου,
10. [ἐκτεί]σῃ ἐκ[άστ]ης ἡμέρας δραχμὴν μίαν· ἐὰν δὲ καὶ ἀσθενήσῃ πλεον ἡμερῶν ἐπ[τ]ῆς [ἀ, ἐκ]τεί-σῃ ὁ Βαρ[λάας] ἐκάστ]ης ἡμέρας ἧς
11. [ἂν ἀ]ρχήσῃ δ[ρ]αχ[μὴν] μί[α]ν· ἐ[ὰν] δὲ εἰς ἱερὸν τι κατα]φύγῃ, βληθήσεται ἐκ τοῦ ἱεροῦ καὶ χρήσεται αὐ[τῷ] ὁ Φρα[άτης] [ . . . . . ]
12. [ἀ]πλοῖς. χορη[γῶ]σιν μέντοι γε αὐτῷ ὁ Φρα[άτης] τὴν] καθ' ἡμέραν τροφήν καὶ ἀμφιεσμόν. δρασμῶ δὲ καὶ θα[νάτου] [καὶ βλάβους καὶ]
13. ἐτέρων κιν[δύ]νων οὐ μέτεσται τῷ Φραάτει. τὸ δὲ προγεγραμμένον ἀργύριον καὶ ἐὰν τι ἄλλο προσσυναχθῇ ἀπὸ των ἀργίων, ἀπ[ο-]
14. δώσει ὁ Βα[ρλά]ας τῷ Φραάτει ἐν μηνὶ Δαι[σίῳ] τ[ῷ] ἐν τῷ ὥς τὸ πρότερον ΓΛΥ ἔτει· ἐὰν δὲ μὴ ἀποδῶ ἐν τῷ ὠρισμένῳ
15. [χρόνῳ]ι, ἔσ[ται] παρ' αὐτ[ῷ] παρεχόμενος ὁ Βαρλάας τῷ Φραάτει τὰς αὐτὰς χρείας ἐπὶ ταῖς προκειμέναις διαστολαῖς μέχρι τῆς τοῦ ἀρ-
16. [γυρίου ἀποδόσεως .] ἐὰν μέντοι γε τοῦ χρό[νου] παρεληλυ[θότος] βού[λη]ται [ὁ] Φραάτης ἐκ[κομ]ίξασθαι τὸ ἀργύριον, ἀπαιτηθεὶς δὲ ὁ Βαρλάας
17. [μὴ] δύνηται αὐτίκα τ[ὸ] ἀργύριον ἀποδοῦναι[ι, ἢ] πράξι[ς] ἔσται[ι] τῷ Φραάτει καὶ παν[τὶ] τῷ τῇ[ν σ]υν[η]γραφῇ ταύτῃ ἐπ[ι]φέρωντι παρὰ
18. [τοῦ Βα]ρλά[ου] καὶ ἐκ τ[ῶν] ὑποκειμένων ὑπαρχόντων αὐτῷ καὶ ὧν ἂν ἐπικτή[σ]ῃ [ἄλλ]ω[ν], ἐκπ[ρ]άσ[σ]ονται κυρίως τὸ πᾶν . . [.]
19. [ . . . ].ητ[ . . . . . ]. ι . ἐτάξατο [δὲ] ὁ Βαρλάας ἀνανεώσασθαι τὴν συνγραφὴν ταύτην διὰ τοῦ ἐν Εὐρωπῇ χρηματιστηρίου ὅταν παρ-
20. [αγγελ]ῇ αὐτῷ [ὑπὸ τοῦ] Φραάτου ἐν ἄλλαις ἡμέραις πέντε[ι]· ἐ[ὰν] [δὲ μὴ] ἀ[ν]ανεώσῃται ἐκτείσειν τῷ Φραάτει ἐπίτιμον ἀργυρίου δραχ-
21. [μὰς τετ]ρακο[σίας εἰ]ς δὲ τὸ βασιλικὸν τὰς ἑσ[σ]ας, καὶ τὴν συν[γρα]φ[ὴν] τ[αύτην] εἶναι καὶ οὕτως κυρίαν. μάρτυρες· Νικάνωρ ΟΜΑΙΑΗΟΥ, ΦΡΑΝ-
22. [ . . . . . ]. α . [ . . . . . Δ]ιογένης ΦΑΛΗ . ΩΤΙ . [ ] (End of writing)

5. Perhaps δεκάγ[δ]ρων; so Harmon. Or ἐλενθ[έ]ρων.

5/6. E.g., οἰκούντων.

7. αὐτῷ π[ᾶσιν], probably. Perhaps ἀ[καί]; perhaps ἐπ[τ]ῆς [ἀ . . . ᾶ] (Harmon).

8. μέχρι κτλ., A. S. Hunt.

9. γνώμης, Hunt.

12. [ἀ]πλοῖς, Harmon. τροφήν καὶ ἀμφιεσμόν, Hunt. δρασμῶ, κτλ., Harmon.

13. κιν[δύ]νων, Harmon.

18/19. τὸ πᾶν ὀφ[είλημα] ὥς πρόκειται, Hunt.

τὸ πᾶν παρ' αὐτοῦ ὥς πρόκειται, Harmon.



*Translation.*

In the reign of Arsaces, king of kings, benefactor, just, manifest god, and friend of Greeks, year 368 according to the reckoning of the king of kings, but according to the former reckoning, 432, on the twenty-sixth day of the month Daesius, in the village Paliga of the district about Idraa, before Mittolbaesus the son of Menas, a member of the staff of Menarnaesus the commander of the garrison and one of the First and Chief-honored Friends and a member of the Body-guard, and before the witnesses whose names appear below: Phraates the eunuch, an arcapat, a member of the court of Manesus the son of Phraates, who is one of the Batesa and of the . . . . ., collector of customs and military governor of Mesopotamia and Parapotamia and chief of the Arabs, has loaned to Barlaas the son of Thathaeus and the grandson of Ab-laeus, dwelling (?) in the village Paliga [ . . . . . ] fortress, four hundred drachmas of good silver of the Tyrian mint, on the security of his property [ . . . . . ] which is (are?) to remain in the possession of the owner, and instead of interest on the above money, Barlaas, staying with Phraates until the time of repayment, will perform for him the services of a slave, doing everything which is ordered him, and absenting himself neither day nor night without the permission of Phraates. If he shall be away by day or by night from Phraates, he will pay a drachma a day; if he shall be sick more than seven days, Barlaas will pay a drachma for each day in which he is absent from work; if he shall run away to a temple, he will be cast out of the temple and Phraates will use him [ . . . . . ]. Phraates will supply him his daily food and clothing; but as to running away, death, [ . . . . . , and ] other risks, no responsibility shall fall on Phraates. The above money and whatever may have accrued to it from the days on which he does no work Barlaas will repay to Phraates in the month Daesius in the year, according to the former reckoning, 433; if he does not repay it in the specified time, Barlaas will remain with Phraates, performing the same services according to the above provisions until the repayment of the money. On the other hand, if, when the time is up, Phraates wishes to collect the money, and if, demand having been made, Barlaas is unable to repay the money immediately, Phraates and anyone else presenting this contract will have the right of collection on the person of Barlaas and on the property in pawn and on whatever else he may acquire, enforcing his entire claim [ . . . . . ].



Barlaas has agreed to "renew" this contract through the registry office in Europus whenever he may be directed to do so by Phraates, in five days from the time of notification; if he fails to make the "renewal," he has agreed to pay to Phraates a penalty of four hundred drachmas of silver, and an equal number to the royal treasury; he has agreed that in that case also, this contract is to be valid.

Witnesses: Nicanor the son of (?)  
Phran... the son of (?)  
Diogenes the son of (?).

*The Historical Record.*

1. For a period of approximately five centuries, a great stretch of land in central Asia and the Near East, the seat of ancient, highly civilized, and very numerous peoples was ruled over by the Arsacid kings and administered as the Parthian Empire. It took over the social and political organization which was the product of the ancient Babylonians and Assyrians, of the Medes and the Persians, and of the Greco-Macedonian conquerors and settlers, and which had been brought to a high degree of refinement by the empires of Seleucus and his descendants. Subsequently it handed over this heritage to its heirs, the many small kingdoms on the borders of the Greco-Roman world, of which the best known is Armenia, and in particular to its direct successor, the Neo-Persian kingdom of the Sassanians. Parthia, then, was a very important state; as such, Parthia figures largely in the history of such neighbors as Armenia and the Roman Empire, and both Roman and Armenian historians have much to say of a certain phase of Parthian history, that is, her foreign, her military, aspect. As a result, extensive histories may be written of Parthia's wars and dynastic troubles. But on the other hand, neither Roman nor Armenian historians were much interested in the organization and administration, in the economic and social conditions, and in the religions and cultures of Parthia. As a result, our curiosity on these points is very poorly satisfied by the literary records, and such non-literary remains as this parchment must be utilized to fill the gap. So far, very little of this sort of evidence has turned up. There are a half-dozen parchments, all either fragmentary or from the outlying parts of the Parthian state, a number of Greek inscriptions mainly from Dura, and a few clay tablets with cuneiform inscriptions of the second and first centuries before Christ. That is all;

in this small group, our parchment is unquestionably the most important single document.

2. The contract begins with a prescript containing the date according to both the Parthian and the Seleucid eras. The former is described as "in the reign of Arsaces king of kings, etc., etc., in the year 368 according to the reckoning of the king of kings." As in the other Parthian records, here both the name and the titles are in the fixed style adopted by King Orodes (57-37 B.C.). The year is 121 A.D., when the aged King Chosroes or Osroes was still ruling; this corresponds also according to the accepted difference of sixty-four years with the second date, "according to the former (i.e., Seleucid) reckoning, year 432." There is nothing here, however, to show whether the starting points of the two eras at Dura were respectively 312 and 248, or (as at Babylon) 311 and 247. In either case, according to the calculations of Mr. J. Johnson, the 26th of Daesius, year 368/432 would fall on June 28/29th, 121 A.D.

The evidence furnished by this prescript is of value in two ways. In the first place it shows that contracts should have an official dating by the Parthian era; that comes first, in the place of honor. But it shows further, that the ordinary dating in Dura was by the Seleucid era; the date of repayment is given only in that form. In the second place, the prescript gives the official formulae: ὡς ὁ βασιλεὺς βασιλέων, and ὡς τὸ πρότερον. With that information, it is possible to correct the restoration of two Babylonian inscriptions of Parthian times, published by B. Haussoullier, "Inscriptions grecques de Babylone," *Klio*, IX (1909), 352 ff. The parchment further raises the question as to the dating of the Avroman parchments, edited by E. H. Minns, "Parchments of the Parthian Period from Avroman in Kurdistan," *Journ. Hellen. Stud.*, XXXV (1915), 22-65. Minns had assumed that the dating was by the Seleucid era. It now seems more probable that, since only one date is given, that date must be in the official, the Parthian, era. That will place both parchments later by 64 years, and remove some of the difficulties which Minns found with (otherwise) anachronistic royal titles.

3. The contract was drawn up in the village Paliga. This is unquestionably the same place as that mentioned by Isidorus of Charax (*Mansiones Parthicae*) as lying on the Euphrates some little distance north of Dura-Europos; by him the name is spelled Φάλιγα. A still different spelling, Φάλλα, is used by Arrian (Steph. Byz. under Φάλλα). The place was an important one, as it lay on the Parthian-Roman frontier. Isidorus writes: παράκειται δὲ τῇ Φαλίγῃ κωμόπολις Ναβαγάθ, καὶ παραρρεῖ

αὐτὴν ποταμὸς Ἀβούρας, ὃς ἐμβάλλει εἰς τὸν Εὐφράτην· ἐκεῖθεν διαβαίνει τὰ στρατόπεδα εἰς τὴν κατὰ Ῥωμαίους πέραν. From the military aspect it needed a fortress (this may well be the *χάραξ* of line 6) and a military governor. From the commercial point of view, it would be the resting place of caravans passing both north and south along the river, and as such would support a considerable civilian population.

Paliga, according to our document, lay in the larger district, called *ὑπαρχεία*, whose name was *περὶ Ἰδράαν*. What this subdivision would be in the Parthian Empire is not known, although in the Seleucid Empire a *hyparchy* was a subdivision of a satrapy. According to Tabari and other sources, the satrapies of the Parthian Empire were subdivided into regions, those in turn into counties, and those into villages. A *hyparchy* would correspond to one or the other of the larger units.

This particular *hyparchy* is not otherwise known. It is designated in the manner of the Seleucid *hyparchies* (as ἡ *περὶ Ἐριζαν ὑπαρχεία*, Ditt., *Or.*, 238). The Avroman documents show a different nomenclature (*ὑπαρχεία Βαίσειροι*) in the more remote regions. There is a question, however, about *Ἰδράα*. The *Ἐριζα* and so on of the Seleucid *hyparchies* is the chief city of the region, and on that analogy, one would expect *Ἰδράα*, or it may well be *Ἰδράα*, to be a city. No such name is, however, known, and it may be that there is here an exception to the general practice. Is it possible, for instance, that we have in this word a local name of the river Khabur?

According to Isidorus of Charax, Paliga lay in a region called Parapotamia, presumably the same as that mentioned in our parchment. According to Strabo (XVI, 2, 12), Parapotamia lay between Apamea and the Euphrates, and was apparently half Roman, half Parthian. The references in Polybius (V, 48, 16, and V, 69, 5) are made more difficult of interpretation from the fact that the region along the Tigris was also called Parapotamia, but it seems probable that Polybius is referring to the Euphrates Parapotamia in these passages.

4. The most important of the persons mentioned in the contract is Manesus—after the king, of course, but about him we may here gather no further information. His titles fall into two distinct classes, of which it is convenient to speak of the second group first. He is, then, *στρατηγὸς Μεσοποταμίας καὶ Παραποταμίας καὶ Ἀραβάρχης*, “governor,” that is, “of Mesopotamia and Parapotamia and chief of the Arabs.” It is noteworthy that he is given the Greek title *στρατηγός* rather than the Iranian *σατράπης*, used regularly in the literary sources. It seems very likely that



this Greek term was taken over by the Parthians from the Seleucid Empire, that in their own language they called the governors *marzapan*, and that they did not use the title *σατράπης* at all. At all events, Manesus is here *στρατηγός* of two large regions, of which the first, as well as the second, was no doubt a satrapy. There is no evidence to show that this union of two satrapies under one governor was normal; the explanation is rather to be seen in the fact that only five years before, this region was the scene of war between Rome and Parthia, and that the resulting confusion and the damage done during the occupation of the region by Trajan had necessitated keeping up the abnormal concentration of administration in the hands of one man.

The combination of the office of governor with that of "chief of Arabs" is found also in Egypt. A commemorative inscription from Pselchis in Upper Egypt (Ditt., *Or.*, 202) shows how a certain Apollonius the son of Ptolemaeus was *arabarch* and governor (*στρατηγός*) of the region around Elephantine, etc. (This interpretation is not the only one possible, but the association of the two offices is clear.) The only other evidence for an *arabarch* in the Parthian Empire comes from the use of the word by Cicero (*ad Att.*, II, 17, 2) as a nickname of Pompey, ridiculing him as a man who has become orientalized, and looks and acts like a Parthian officer, or a minor Syrian dynast.

The Pselchis inscription shows further that the two offices of *στρατηγός* and *αραβάρχης* were associated with that of collector of customs of the Red Sea (*παραλήμπτης τῆς Ἐρυθρᾶς θαλάσσης*). That is the basis of the restoration in line 5, *παρ[αλή]πτου*; it is quite natural that in troublous times in a frontier district all these functions should be in the hands of one man.

So Manesus was "collector of customs, and governor, and *arabarch*"; before the mention of these titles, however, come two others, of which the first is read certainly as *βατησα*. It must be a Parthian title, from the fact that it has no Greek inflection; it may further be assumed, from the fact that Manesus is called *τῶν βατησα*, that this is not an office, but a court title, a rank. There seems to be no difficulty in connecting this with the title which appears in a variety of spellings in the Sassanian Empire and in Armenia and in Georgia, meaning, roughly, governor general. From the spelling "padhešah" or "padhešā" it is only a step to *βατησα*, a title sufficiently great and sufficiently uncommon to resist Hellenization.

After *βατησα* comes *καὶ τ[ῶν]*; we look, therefore, for another title, which



has defied reading. Two suggestions are ἐλευθέρων and δεκάνδρων, both of which are difficult paleographically. The former would be explained as referring to the small upper class in Parthia, known to Greek and Roman writers as "free men." In the army which was fighting against Antony there were 400 "free men" and 15,000 slaves or bondmen (Just. XLI, 2; cf. Plut. *Cras.*, 21). The other term would mean a royal council made up, perhaps, of the governors general. Both Pliny (*Nat. Hist.*, VI, 25) and Ammianus Marcellinus (XXIII, 6) give the number of large divisions in Parthia and so of the governors as 18; these would include not only the Parthian governors general, but the vassal kings as well. Whether or not there were 8 vassal kings and 10 governors general we have no way of knowing.

Manesus was, therefore, a very great man, and he may well have been a close relation of the two other men of the same name who are known to history. One (Plut. *Anton.*, 37) first offered his help to Antony, and was later pardoned by Phraates. The other (Tacitus, *Ann.*, XV, 2) was appointed commander-in-chief of the army which invaded Armenia. Both are probably to be connected with the Mesopotamian provinces.

5. The contract was drawn up before a man called Mittolbaesus, the son of Menas, who was member of the staff of a man called Menarnaeus or Menarcaeus. The names are probably all Anatolian. The last had several titles, of which the first is his office, the others his court rank. The latter are precisely what we are familiar with from the Hellenistic kingdoms: "first and chief-honored friends, and members of the body-guard" are well known from the time of Alexander, and they are elsewhere attested, also, for Parthia (cf. Cumont, *Doura-Europos*, Ins. No. 134 [135/6 A.D.]; Ditt., *Or.*, 430 [Delos, 124-87 B.C.]; *ibid.*, 754 [Hieropolis, 1st century. B.C.]; Philostr., *Vit. Apoll.*, I, 28 and 33). The other title, φρούραρχος, prevents us from locating Menarnaeus at Dura, where the military governor is called στρατηγός καὶ ἐπιστάτης, except conceivably in some extraordinary capacity. It is much more likely that he was the commander of the garrison at Paliga, the frontier fortress.

6. The lender, Phraates, is characterized as εὐνοῦχος ἀρκαπάτης τῶν παρὰ Μανήσου. Of his precise relations with Manesus we know nothing certainly, but the other two titles are very instructive. *Arkapatēs* is a well-known term. In the times of the Arsacids, an *arkapat* (other spellings are also found) was the hereditary holder of a city, a kind of feudal lord. Later, in Sassanian times, the title meant a holder of the

highest rank in the Empire. Of the former period is Septimius Orodes, the ruler of Palmyra in the third century A.D., who was at once a Roman procurator and an Iranian *arkapates*.

The part played by eunuchs in Parthian social and political affairs was an extensive one. Tacitus (*Ann.*, VI, 31) speaks of great Parthian "Sinnaces, insigni familia ac perinde opibus, et proximus huic Abdus ademptae virilitatis. Non despectum id apud barbaros ultroque potentiam habet." This was a direct heritage from earlier times. So Bagoas, a eunuch, was governor of Judaea in 408 B.C. Hermias, the friend of Aristotle, was tyrant of Atarneus and of Assus. Philetaerus was phrurarch of Pergamum and founder of the dynasty of the Attalids. Much later, the Armenian historian Agathangelus (Langlois, Vol. I, p. 170) calls the chief of the eunuchs third in the dignitaries of Armenia.

The status of these eunuchs is curious. The term "eunuch" stands in place of a father's name, as a description of their social standing. They have sacrificed their virility to the god, and so become the deity's slaves, losing their connection with their families. And yet they may have a very high social standing, and hold important civil and military positions, and bequeath their holdings, if they are hereditary, to their adopted sons. They may be either slaves or free men; slavery is not inherent in the status of a eunuch.

It may be noted in this connection that there is at Dura a very interesting fresco which formed a part of the pictorial decoration of the Temple of the Palmyrene Gods. Two men with their respective boy-attendants are represented as sacrificing at an altar. The painted inscriptions near the figures read: 'Ιάβσυμσος 'Αβδαάθητος βουλευτής (the adult man); 'Αβδαάθης 'Ιαβσύμσου (the boy); 'Οτῆς εὐνοῦχος ὁ κτίσας τὴν ἐξέδραν (the other adult); Γορσάκ (the other boy). The eunuch Otes and his attendant (adopted son?) Gorsak are both Iranians, as their names indicate. I see no reason for taking Otes to be a priest; he is surely, like his friend the senator Iabsymsos, a layman and probably a Parthian officer.

The precise circumstances of this Phraates it is impossible to determine, and yet his social position is clear. Whether or not he was feudal lord of the village Paliga, he was a man of wealth and consequence.

7. Barlaas, last and most humble, is the only Semite mentioned in the document. He had, according to the document, some connection with the village Paliga, but just what, the lacuna at that point prevents us

knowing. He had, at all events, something which he could call "possessions," and was free enough to contract away his services.

8. The two witnesses whose names may be made out with certainty are Greeks, and belonged to the class numerous in Mesopotamia since the Seleucid times, and especially courted by the Arsacid kings, who affected the title, φιλέλλην.

9. The coin in which the loan is made is of much interest. It is, according to Mr. C. T. Seltman of Cambridge, England, probably the Imperial Coinage of Phoenicia, from the mint at Tyre opened by Trajan for the issue of silver tetradrachmas. These coins appear to be of purer silver than much contemporary currency. On the other hand, it has been noted that at just this period, the quality of the Parthian silver money was gradually deteriorating, perhaps because of the burden of the war with Trajan. The Tyrian coins, then, may well have been favored for trade in Mesopotamia, even after the withdrawal of the Roman armies.

10. There is a further point of interest in the fact that Phraates hires a free man to perform slave labor for him, instead of buying a slave, especially at a price which is not low. Either then the price of slaves was exorbitant at this time, or the quality of slave labor was below that which would be rendered by such a free laborer as Barlaas.

### *The Legal Transaction.*

The facts of the case are as follows. Phraates, a eunuch and probably a feudal noble in the Parthian Empire, loans to one Barlaas, the son of Thathaeus and the grandson of Ablaeus, an Arab by his name, the sum of four hundred drachmas of good silver on the security of all his property, for the period of one year. Instead of the interest on the loan, Barlaas agrees to give his own services, living with Phraates and doing whatever is ordered him. He is to be allowed seven days away from work during the year on the score of sickness, but no others for any reason; further absences are to be paid for at the rate of a drachma a day. On the other hand, Barlaas is to receive his food and clothing. All the risks to Barlaas himself and to his property, including such possibilities as that he may run away or die, or his property be damaged, or the exaction of state taxes or other debts from him, are to be borne by the borrower. When the year is up, there are several possibilities. In the first place, Barlaas may repay the loan with any accrued fines, and Phraates may accept it, thus bringing the transaction to a close. Or



Barlaas may not repay the money, and both parties may continue to act as they had under the contract. Again, Phraates may demand his money, and failing to get it, take action against the person of Barlaas, the security, and any further property which he may have acquired in the meanwhile; in the first case, it would doubtless mean the sale or reduction of Barlaas into *de jure* slavery.

In general this transaction fits in well with what we know of Greek contractual law from the references in literature, the few contracts or references to contracts found on inscriptions in Greece, the Aegean Islands, and Asia Minor, and the thousands of papyrus documents from Ptolemaic and Roman Egypt. Loans ἐπὶ ὑποθήκῃ are common; they have, as a characteristic mark running through the many variations which they exhibit from time to time, the fact that the property pledged as security is retained by the debtor, but designed by him for eventual complete settlement of the claim, in case he cannot pay it in cash. He would ordinarily in such a case simply hand over to the creditor the object pledged, and so end the matter. The right of general execution beyond the security, here allowed the creditor, is, however, not unexampled. There are a few cases in the Egyptian papyri, in contracts of loan of a similar sort, where creditors are allowed by a special provision to attach the security, any further property the debtor may have, and finally the debtor's person.

The personal service of Barlaas to pay the current interest is technically known as *antichresis*. *Antichresis* of all sorts of things—land, houses, animals, slaves, children, sisters—is found in papyrus contracts of all periods. Personal *antichresis* of the borrower himself, however, is extremely rare in other parts of the Greek world. In one instance known to me from Egypt, *B.G.U.*, 1126, from Alexandria in the year 8 B.C., a woman named Protarche sells her services as a bar-maid for three years for the sum of one hundred and forty drachmas. Of that amount, one hundred drachmas is paid to her in cash, and is called a loan; that is to say, she must repay it all with interest if she leaves her position before the period is up. But if she stays through, the loan and the interest are canceled, and she will get also the forty remaining drachmas of her pay. The document is quite parallel to ours. It is not very important that Protarche will not repay her loan, while Barlaas must repay his. The actual pay of Barlaas may be rather higher than that of Protarche, for the interest on the four hundred drachmas should amount to more than sixty drachmas a year.



It is important, however, that only one Protarche document is known from Egypt, while there are two (for *Dura Parchment No. III*, edited by Cumont, *Fouilles de Doura-Europos*, pp. 304-307, is apparently the end of a similar contract) from Dura alone, and many of just this sort among the thousands of cuneiform tablets which bear evidence of Babylonian legal activity from the fifth millennium to the beginning of the first century before Christ. In other words, in this feature of personal *antichresis* which turns the contract of loan into a kind of service contract, we must see operative Babylonian tradition. It is natural enough. The formulae of the contract are Greek, as has been pointed out; it is in such things as formulae that Greek influence would be most felt. But in Babylonia we are in the presence of the oldest legal tradition known to us, a tradition which maintained itself with great persistency through the varied periods of Babylonian political history. There is nothing strange, then, to find Babylonian practice in a contract from Mesopotamia whose principals are a Parthian and an Arab, and in which Greeks serve only as witnesses.

Service contracts combined with loans are familiar in primitive law; instances have been cited from such an out-of-the-way place as the Malay peninsula. It is usual in such cases to have the loan a form of payment in advance, which, as with Protarche, need not be repaid if the work contracted for is duly performed. But in Babylonia from the earliest times service contracts are found where, as in the case of Barlaas, the return to the laborer is merely the interest on, or use of, the money. One from the time of the first Babylonian dynasty, cited by É. Cuq, *Études sur le Droit Babylonien, les Lois Assyriennes, et les Lois Hittites* (Paris, 1929), pp. 314 f., runs as follows: "Iḫbatum has placed his person at the disposition of Ubar-Šamaš who has loaned him 5 shekels of silver. When he repays the money, he will recover his freedom." When such a situation was abused, so that the debtor, unable to repay the loan, was being subjected to indefinite servitude, the courts might step in and rescue him, as they did Ina-šilli-bâbî (see R. P. Dougherty, *Shirkûtu of Babylonian Deities*, Vol. V, Part 2, of the "Yale Oriental Series," pp. 28 ff.). There seems no reason to regard this form of service as more burdensome or of longer duration than that to which Protarche was bound.

Of particular interest is the last clause of the contract. It is, by a bilateral feature (ἐδάνεισεν ὁ Φραάτης, ἐτάξατο δὲ ὁ Βαρλάας), made parallel with all that precedes. Furthermore, violation of it is made punish-

able as breach of contract is punishable in many Egyptian contracts, by a fine of double the amount involved, with the contract remaining valid all the same. It is, therefore, a clause of considerable importance. No exact parallels for it are known, and a certain explanation of it is probably impossible without more evidence. The interpretation depends on the understanding of the verb ἀνανεόομαι. If we take the verb in its ordinary meaning of "renew," the clause would require Barlaas to renew the contract when demand was made upon him, even if he were ready to repay the loan. That would, however, require the assumption of a strange legal situation, where a debtor would not be allowed to pay his debt. It has been suggested, also, that the verb might mean "replace"; although there are no parallels for that meaning, it is not impossible to see in the operation here provided for a parallel to the Egyptian ἐκμαρτύρησις—whereby a privately drawn contract might be replaced by a δημόσιος χρηματισμός at a notary's office. But although not "notarial," this contract was drawn up, with witnesses, before a government official; it is hard to assume that it is not valid as it stands.

The most probable interpretation, worked out by Professor Harmon, proceeds from the observation that the clause should have something to do with the execution of the debt, since it follows immediately upon the clause of execution, and connects the verb ἀνανεόομαι here with a use of the noun ἀνανέωσις in the execution clauses of a few Greek contracts from Egypt. The argument is developed at length in the article in Volume II of the *Yale Classical Studies*. Here it need only be stated that the interpretation sees in ἀνανέωσις the alternative to ἀντίρρησις—the "denial" made by a person when called upon to settle a debt which he felt he did not owe. If, that is to say, demand was made for payment of a debt, which the debtor could not meet, he would be required to do one of two things: either to "deny" the obligation, in which case the matter might be taken to court, or to "reacknowledge" it (or however ἀνανεοῦσθαι would be translated) at a registry office, and so allow execution on the debt to go forward.

The formulae of the document are the regular formulae of Greek contractual law. It is the type of document known as a "protocol," or συνγραφή; the facts of the case are stated in the third person, and the instrument is bilateral, binding on both parties. The heading, with the dating by a king's reign (the double dating is a Parthian feature) and the location by village and district, is what we have in the Egyptian papyri. The agent of the phrurarch here acts as would the agent of a

notary; the statement about the witnesses seems to be a local feature. After the body of the contract, wherein the expressions may be paralleled in great detail from the Egyptian papyri, come the names of the witnesses, just as in the earlier documents from Egypt where witnesses are employed. There is here only one feature which is apparently due to Babylonia; any official contract in Egypt was drawn up before a notary. Notaries are known in Mesopotamia at this time, and there was one at Dura. But this contract, drawn up at the village Paliga, was attested before a government officer; this is in perfect harmony with old Babylonian practice, which went back presumably to a time before the office of notary became specialized, when the registering of contracts, both for their own validity and for the collection of the proper government taxes, if any, was a regular province of the city governor.

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Among the finds of the Expedition of 1928-29 were three other documents which may be mentioned here, although work on them has not advanced to a point warranting publication. All promise to be of great interest, both from the nature of their contents, and from paleography.

1. *Dura Parchment No. XI* is an irregularly shaped fragment,  $8.2 \times 4.1$  cm., containing apparently part of a contract in Greek, perhaps relating to land. If the number it contains is a date it is very early, belonging either to the Seleucid or early Parthian period. It is incomplete on every side except possibly the bottom. The surface of the parchment is so badly flaked that it is difficult to read letters with certainty.

2. *Dura Parchment No. XII* is a long narrow strip,  $24.3 \times 3$  cm., from the bottom (top?) of a document written in a language which Dr. A. E. Cowley of Oxford identified as Pahlavi, but which Professor A. V. Williams Jackson of Columbia considered Aramaic. It is in a good state of preservation, and its three lines of writing should be read with certainty some day.

3. Of special interest is the third, for it is the first papyrus document found at Dura, and confirms Pliny's statement (*Nat. Hist.*, XIII, 11, 22): "Nuper et in Euphrate nascens circa Babylonem papyrus intellectum est eundem usum habere chartae. Et tamen adhuc malunt Parthi vestibus literas intexere." It is a section, made up of five fragments

which seem to fit together, from the upper right hand corner of a document containing writing in Greek. What has been read consists mainly of names, and gives no good idea of the nature of the contents. It has been classified as *Dura Papyrus No. I.*



## ADDENDUM TO PAGE 75

BY CLARK HOPKINS

Ammianus Marcellinus (XXIV, 6) describes part of the Sassanian forces fighting against the Emperor Julian as *contecti scutis oblongis et curvis quae texta vimine et coriis crudis gestantes densius se commovebant*. One could not ask for a better description of our own great shield than these phrases applied to the Sassanian "oblong and curved and protected by withes and raw skins."

## ADDENDUM TO PAGE 147

BY M. ROSTOVITZ

The interpretation of the bronze swastika stamp with its inscription is, of course, hypothetical. To the quotations of Mr. Johnson I may add some more which make his and my interpretation of the stamp the more probable. It is well known that some of the numerous stamps of Roman times have been proved to have served as stamps for stamping bread and jars of wine. Such is the signaculum which appears on the loaves of bread found at Herculaneum: *C]eleris Q. Grani Veri ser(vi)* (*C.I.L.*, X, 8058, 18); cf. *ibid.*, 1403a, 3.<sup>1</sup> Such is equally the signaculum *C.I.L.*, XII, 5690, 96: *L. Oli Maximi* which appears in abbreviated form on an amphora: *Ol(i) Ma(ximi)* (*C.I.L.*, XII, 5683, 205; cf. Plin., *N.H.*, 33, 1, 26; see M. Siebourg, *Bonn. Jahrb.*, 116, 1907, p. 16). The same Siebourg in the article just quoted has collected the evidence on stamps impressed on various clay pots which contain a good wish, mostly the words *εὐτύχει* or *ζήσας*, both as regards the impressions, and the stamps and rings by which the impressions were made. I may note in this connection that forms used for making cakes which were eaten at sacred ceremonies have been found both in Greece and in the Danube lands. Such are two cake-forms of clay in Berlin, one of which refers to the Eleusinian mysteries, another to a sanctuary of Serapis and Isis or Pluto and Persephone in the Greek city of Ilion (see M. Bieber,

<sup>1</sup> Siebourg in the article quoted below mentions a signaculum (he quotes IX, 190, probably *C.I.L.*, IX, signaculum, No. 190; the quotation is wrong) which was used for stamping the Herculanean loaves. I was not able to trace this signaculum in any of the Italian volumes of the Corpus.

"Skenika. Kuchenform mit Tragödienszene," *Berlin Winckelmann's Programm*, 75, 1915, pp. 26 ff., Pl. III). Similar are some forms found in the Danube lands with figures of gods engraved on them, though these last could have been used equally in shops and sold on days dedicated to the corresponding gods (see W. Schmidt, *Jahrb. f. Altertums-kunde*, VII [1913], pp. 180 ff.). The majority of the Danube forms, however, all of which must be dated in the fourth century A.D. are connected with some important events in the activity or life of the emperors and include in addition to the corresponding very interesting scenes also inscriptions containing a good wish for the emperors (see *C.I.L.*, III, 6009, 9-12, cf. 7 and 8; 12013, 1 and 2; *C.I.L.*, XII, 5687, 37 and 38). The cakes made by means of these forms served no doubt for distribution in connection with these memorial days. Similar are the many (almost 400) forms for cakes of about 200-250 A.D. found in 1906 at Ostia (A. Pasqui, *Not. d. Sc.* [1906], p. 357; cf. M. Bieber, *op. cit.*). They all show scenes connected with games; circus-races, *venationes*, and the theater, and were no doubt sold during the shows or distributed to the spectators by those who organized the shows. Note that with them were found little bottles probably for wine. All the cakes produced by the forms had the same weight. The place where the forms were found was no doubt a little factory of such clay objects which was connected with a large bakery and a wine-shop. (Cf. W. Kubitschek, *Jahrb. f. Altertums-kunde*, 5 [1911], p. 169; W. Schmidt, *op. cit.*). I may add in this connection that I recognize a bread-stamp in a bronze stamp of the Museum of the Archaeological Society of Athens with the inscription καρποί; cf. the inscription scratched on the back of the Dura stamp. (A. de Ridder, *Cat. des bronzes de la Soc. arch. d'Athènes*, p. 90, No. 461). The meaning of the inscription is of course that the goddess of the sanctuary, the Τύχη, is or should be kind to Dura.

## INDEX OF THE INSCRIPTIONS

Explanatory Note.—Roman numerals refer to the first and second reports respectively. Capital letters (R., D., H., C.) denote certain series of inscriptions. For R. see I, pp. 32 ff. For D. see II, pp. 114 ff. For H. see II, pp. 83 ff. Inscriptions of series C. will be cited by page- as well as inscription-number. Arabic numerals, which are not page citations, refer, with an exception to be noted below, to numbers of inscriptions. Arabic numerals, enclosed in parentheses and following page citations, also refer to numbers of inscriptions. Pa. refers to Parchment No. X. Arabic numerals following Pa. refer to lines of the parchment.

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Pa. 11, Pa. 12, Pa. 13, Pa. 14, Pa.  
15, Pa. 16, Pa. 17, Pa. 18, Pa. 20  
(*bis*).

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- λεαάβου (gen.), II, D. 73.

...όδωρος Θεοφίλου, II, D. 69.

- ον Διονυσίου, II, H. 33.

-- ος Νικάνορος, II, D. 90.

-- ος Σελεύκου, II, D. 109.

-- τακά, II, p. 168 (3).

#### B. *Names of Roman Emperors and Kings.*

βασιλεὺς βασιλέων 'Αρσάκης εὐεργέτης  
δίκαιος ἐπιφανής φιλέλληνος, II, Pa. 1.  
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42 (1). Commodiana, I, p. 42 (1).  
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#### C. *Names of Divinities.*

'Αθηνᾶ or 'Αθηναία, I, p. 47 (1).

Αἰγόκερως, II, pp. 161 ff. (I).

'Απόλλων, II, p. 165 (2).

'Αρκίνος, II, pp. 161 ff. (I).

"Αρτεμις, II, D. 139.

Δίδυμοι, II, pp. 161 ff. (I).

Ζεύς, II, H. 20, H. 28. Ζ. Μέγιστος, II,  
H. 2. Ζ. Σωτήρ, II, H. 4.

Ζυγός, II, pp. 161 ff. (I).

'Ηρακλῆς (?), I, p. 47 (1).

Θεοί, II, D. 139.

'Ιαρειβώλος, II, H. 3.

'Ιχθύες, II, pp. 161 ff. (I).

Κρίος, II, pp. 161 ff. (I).

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Νέμεσις, I, p. 48 (2).

Victoria, I, p. 42 (1).

Πάρθενος, II, pp. 161 ff. (I).

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Στίλβων, II, pp. 161 ff. (I).

Ταῦρος, II, pp. 161 ff. (I).

Τοξότης, II, pp. 161 ff. (I).  
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 Παραποταμία, II, Pa. 5.  
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 134/3 B.C.—II, D. 74.  
 17/6 B.C.—II, D. 72.  
 4/3 B.C.—II, p. 168 (4).  
 32/3 A.D.—II, D. 33.  
 50/51 A.D.—II, H. 4.  
 61/2 A.D.—II, p. 169 (5).  
 65/6 A.D.—I, R. 5b.  
 78/9 A.D.—II, D. 79.  
 June 28/29, 121 A.D.—Parchment No. X.  
 164/5 A.D.—I, R. 17, R. 18; II, D. 24, D. 32, D. 103.  
 176 A.D.—II, pp. 161 ff. (I).

179/180 A.D. or 182/3 A.D.—II, D. 63.  
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*F. Administrative Titles and Terms.*

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decurio cohortis, I, p. 42 (1); II, p. 149 (5b).

πρώτοι καὶ προτιμωμένοι φίλοι, II, Pa. 3.

στάτωρ, I, R. 8a, R. 10, R. 11; II, D. 28, D. 34. σ. τριβούνι, I, R. 14; II, D. 24, D. 27, D. 30.  
 στρατηγός καὶ ἐπιστάτης τῆς πόλεως, II, H. 4.  
 στρατηγός Μεσοποταμίας καὶ Παραποταμίας, II, Pa. 5.  
 σωματοφύλαξ, II, Pa. 3.

φρούραρχος, II, Pa. 3.

χιλίαρχος, II, H. 3.

*G. Greek Words.*

ἀμφιεσμός, II, Pa. 12.  
 ἀναγείρω, II, H. 2, H. 4.  
 ἀνάλωμα, II, H. 4.  
 ἀνανεόομαι, II, Pa. 19, Pa. 20.  
 ἀπαιτέω, II, Pa. 16.  
 ἀπλοῦς, II, Pa. 12.  
 ἀποδίδωμι, II, Pa. 13, Pa. 17.  
 ἀπόδοσις, II, Pa. 8, Pa. 16.  
 ἀποκοιτέω, II, Pa. 9.  
 ἀπόκοιτος, II, Pa. 9.

ἀραγός, II, Pa. 12.  
 ἀργέω, II, Pa. 11.  
 ἀργία, II, Pa. 13.  
 ἀργύριον, II, Pa. 6, Pa. 7, Pa. 13, Pa.  
 15, Pa. 16, Pa. 20.  
 ἀσθενέω, II, Pa. 10.  
 ἀφημερεύω, II, Pa. 9.  
 ἀφήμερος, II, Pa. 9.

βάλλω, II, Pa. 11.  
 βασιλεύω, II, Pa. 1.  
 βασιλικόν, II, Pa. 21.  
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 βούλομαι, II, Pa. 16.

γίγνομαι, II, Pa. 9.  
 γνώμη, II, Pa. 9.

Δαίσιος, II, Pa. 2, Pa. 14.  
 δανείζω, II, Pa. 4.  
 διαστολή, II, Pa. 15.  
 δίδωμι, II, H. 20.  
 δουλικά, II, Pa. 8.  
 δραχμή, II, Pa. 6, Pa. 10, Pa. 11, Pa.  
 20.

δύναμαι, II, Pa. 17.  
 ἐκκομίζω, II, Pa. 16.  
 ἐκπράσσω, II, Pa. 18.  
 ἐκτείνω, II, Pa. 10, Pa. 20.  
 ἐπίτιμον, II, Pa. 20.  
 ἐπιφέρω, II, Pa. 17.  
 ἐποδός, II, Pa. 14.  
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 εὐνοῦχος, II, H. 5, Pa. 4.  
 εὐχαριστώ, I, p. 41 (C. 3); εὐχ. τῇ Τύχῃ,  
 II, D. 41.  
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ήμερινή, II, H. 2.

θαλλός, II, Pa. 12.

καρπός, II, p. 147 (5a).  
 καταφεύγω, II, Pa. 11.  
 κέλευσις, II, H. 3.  
 κίνδυνος, II, Pa. 13.

κόμμα, II, Pa. 6.  
 κροσι - ς, II, H. 21.  
 κυρία, II, Pa. 21.  
 κύριος, II, Pa. 7. κυρίως, II, Pa. 18.  
 κώμη, II, Pa. 2, Pa. 6.

μαρτύς, II, Pa. 4, Pa. 21.  
 μέτειμι, II, Pa. 13.  
 μιμνήσκω, I, R. 2, R. 3, R. 5, R. 6, R. 7,  
 R. 8a, R. 10, R. 11, R. 11a, R. 12,  
 R. 14, p. 41 (C. 8), p. 45 (2), p. 45  
 (3); II, H. 10, H. 11, H. 14, H. 15,  
 H. 18, H. 27, H. 28, H. 34, H. 35,  
 D. 1, D. 3, D. 14, D. 15, D. 20, D.  
 21, D. 22, D. 24, D. 25, D. 27, D. 28,  
 D. 29, D. 30, D. 31, D. 34, D. 37,  
 D. 40, D. 41, D. 48, D. 63, D. 68,  
 D. 115, D. 139, p. 165 (2).  
 μόσχος, II, H. 20.

Νηφαρακ, II, D. 41, D. 66, D. 67, D.  
 100.

ὀρίζω, II, Pa. 14.

παιδίον, II, H. 61, H. 62.  
 παραγγέλλω, II, Pa. 19.  
 παραληπτός, II, Pa. 5.  
 παρέρχομαι, II, Pa. 16.  
 παρέχω, II, Pa. 8, Pa. 15.  
 ποιέω, II, Pa. 8.  
 πόλις, II, H. 2.  
 πράξις, II, Pa. 17.  
 προγράφω, II, Pa. 13.  
 πρόκειμαι, II, Pa. 15.  
 προσκυνέω, II, D. 42.  
 προσσυνάγω, II, Pa. 13.  
 προστάσσω, II, Pa. 8.  
 προτιμάω, II, Pa. 3.  
 πολυούρος, II, D. 102, D. 103.

σεισμός, II, H. 2.  
 συμπαραμένω, II, Pa. 7.  
 συγγραφή, II, Pa. 17, Pa. 19, Pa. 21.  
 σωματοφύλαξ, II, Pa. 3.

τάσσω, II, Pa. 19.



τέλος, II, D. 41.  
 τελώνης, II, D. 67, D. 69, D. 100.  
 τόκος, II, Pa. 7.  
 τροφή, II, Pa. 12.

ὑπαρχεία, II, Pa. 2.  
 ὑπάρχω, II, Pa. 7, Pa. 18.  
 ὑπογράφω, II, Pa. 4.  
 ὑποθήκη, II, Pa. 6.  
 ὑπόκειμαι, II, Pa. 18.

φίλος, II, Pa. 3.

χάραξ, II, Pa. 6.  
 χορηγέω, II, Pa. 12.  
 χράσμαι, II, Pa. 11.  
 χρεία, II, Pa. 8, Pa. 15.  
 χρηματιστήριον, II, Pa. 19.

H. (a) *Latin Words*. (b) *Latin Words  
 Grecized*. (c) *Greek Words Latinized*.

(a)  
 adamplatio, II, H. 1.  
 cohors II Ulpia, II, H. 1. cohors II  
 Ulpia Paphlagonum equitata Com-  
 modiana, I, p. 42 (1).  
 legio IIII Scythica, I, p. 49 (4); II,  
 H. 1.  
 quondam, I, p. 49 (4).  
 sagittarii, II, H. 1.

(b)  
 caesariani = καισαριανοί, II, D. 32.  
 porta = πώρτα, II, D. 41.

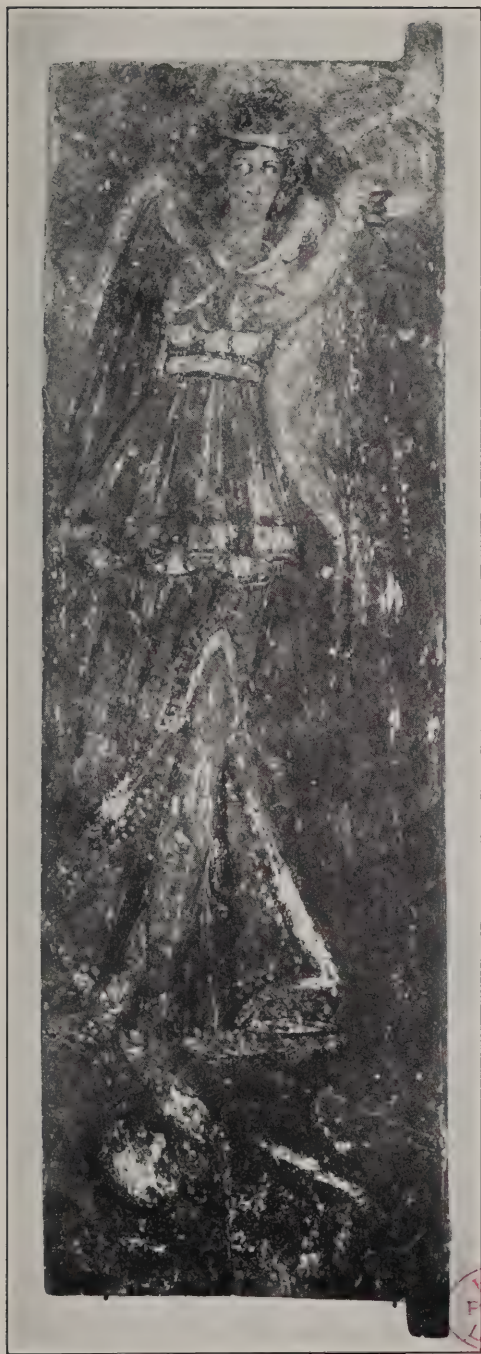
(c)  
 στρατηγός = strategus, II, p. 149 (5b).



## PLATES



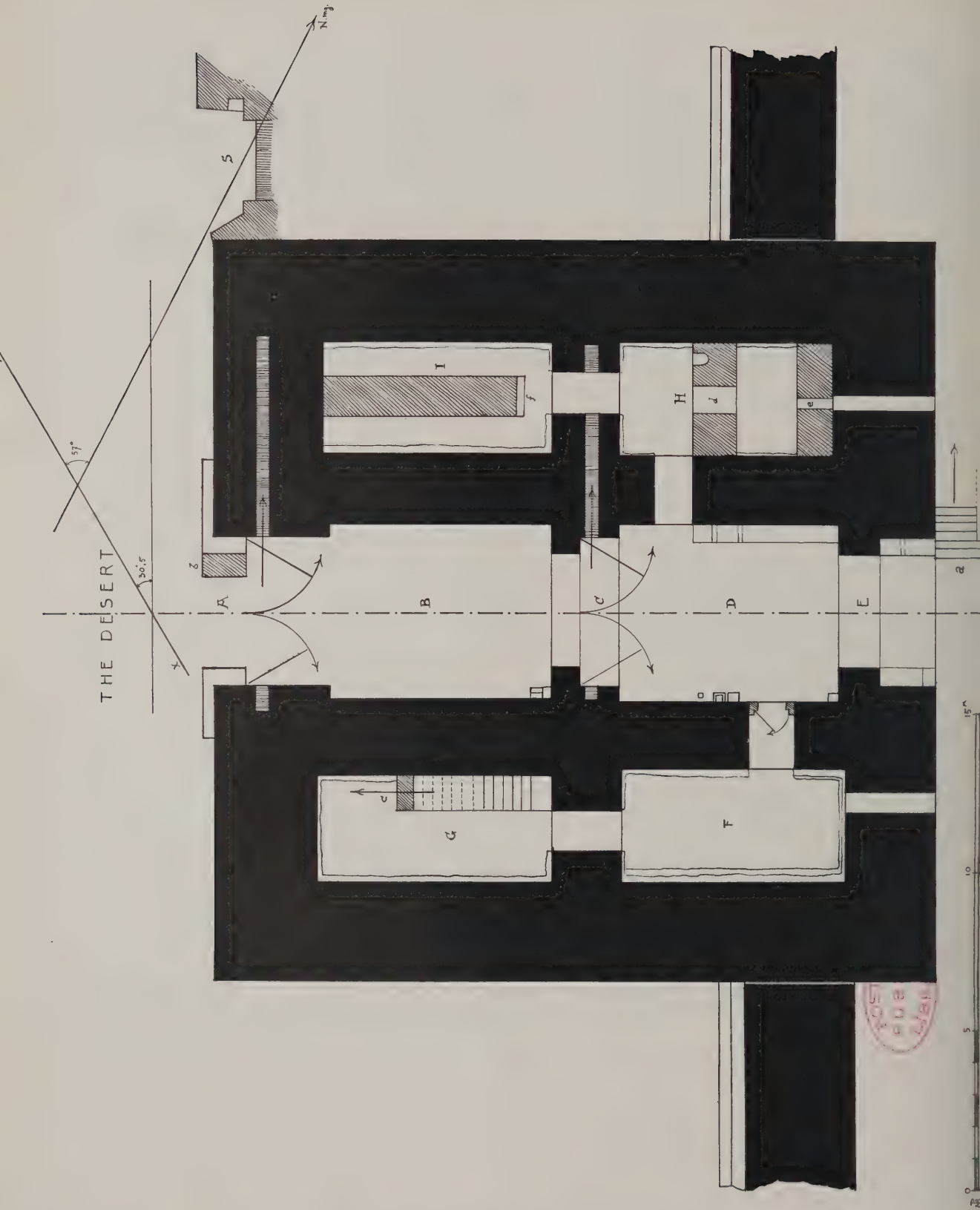




1. PAINTED PANEL OF VICTORY



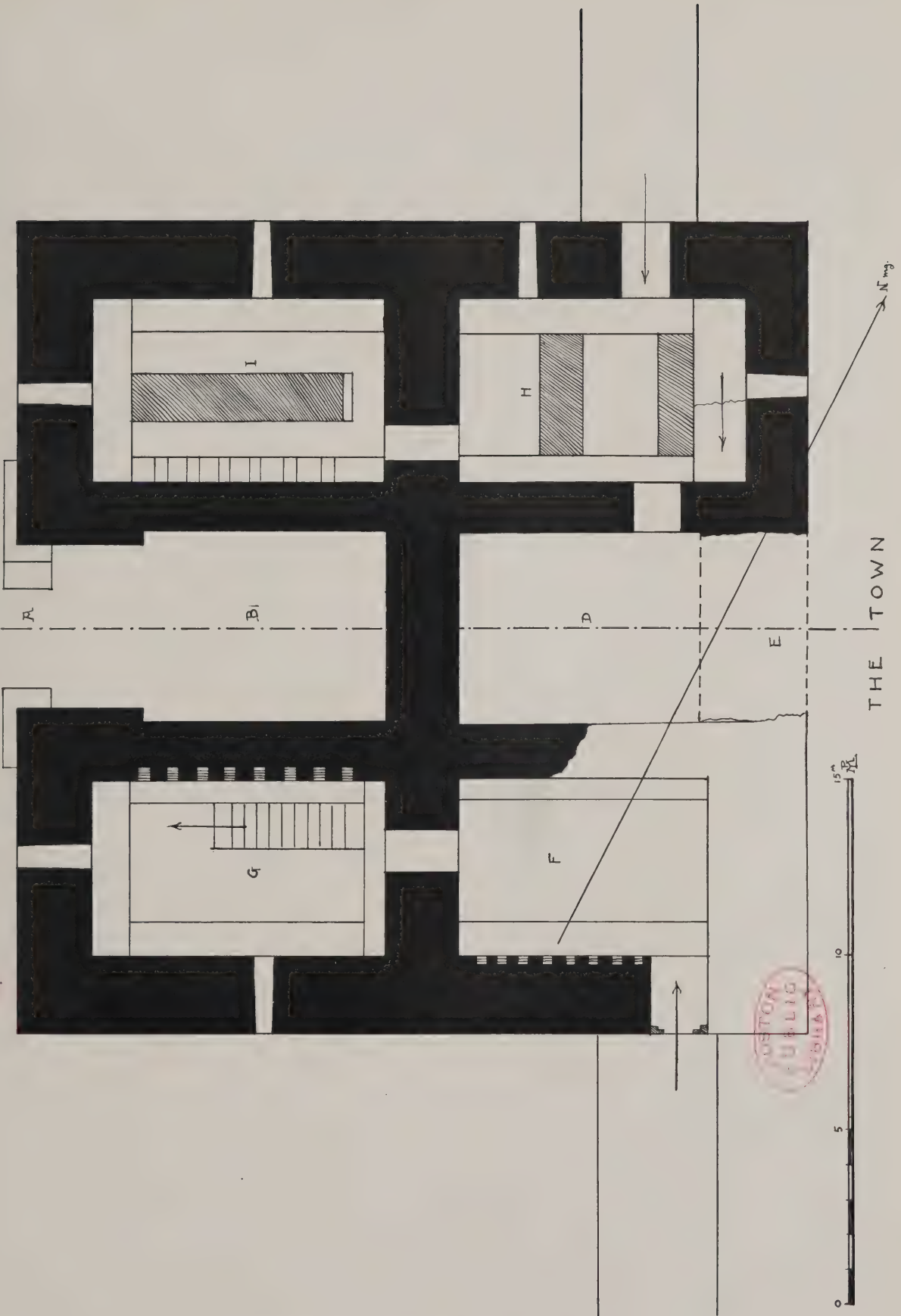
2. VICTORY FROM PAINTED GRAVE AT PALMYRA



PLAN OF PALMYRENE GATE, GROUND FLOOR  
(DRAWN BY M. PILLET)

THE DESERT

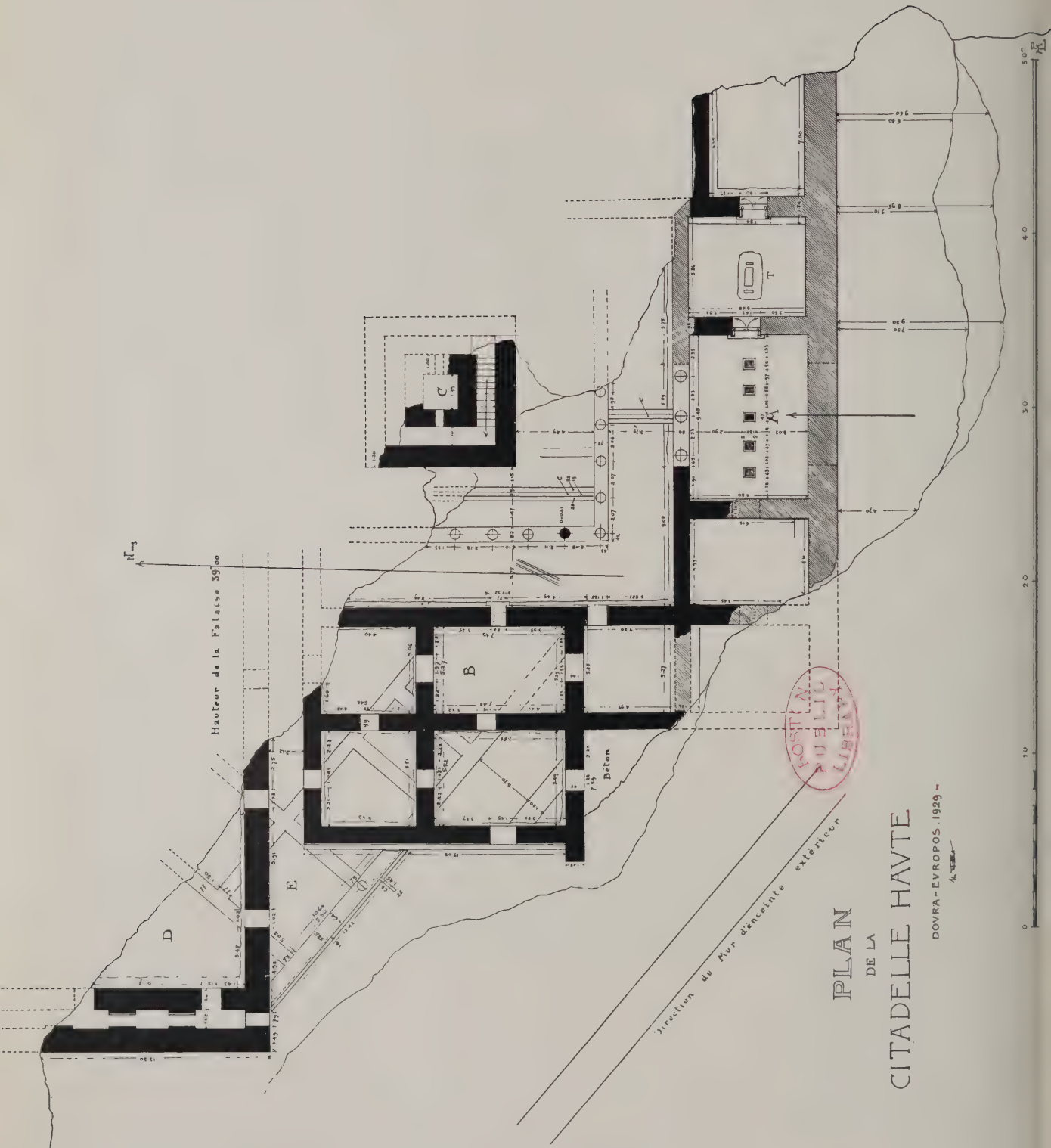
THE TOWN



PLAN OF PALMYRENE GATE, UPPER STORY

(DRAWN BY M. PILLET)

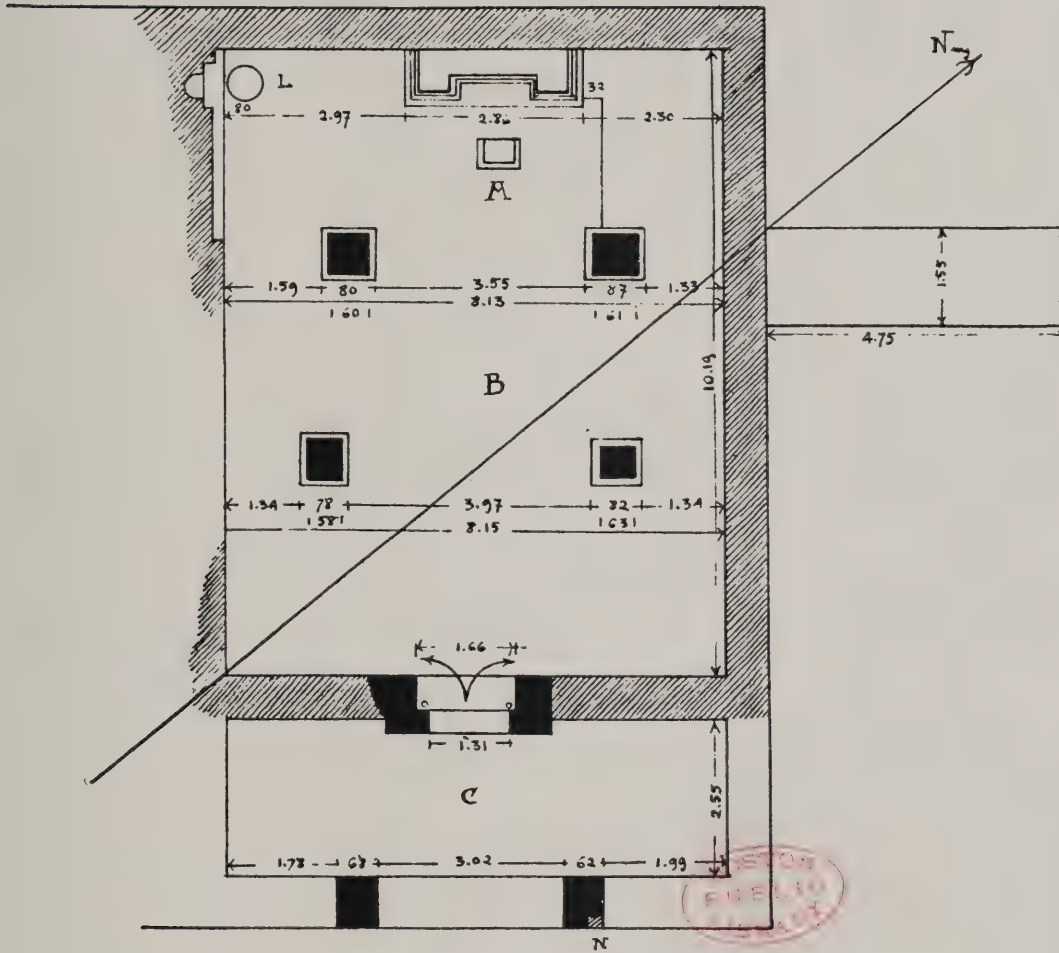




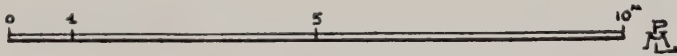
PLAN OF BUILDINGS ON THE CITADEL  
(DRAWN BY M. PILLET)



V



# TEMPLE DES ARCHERS ROMAINS



PLAN OF TEMPLE OF ROMAN ARCHERS  
(DRAWN BY M. PILLET)

NOT EXCAVATED

NOT EXCAVATED

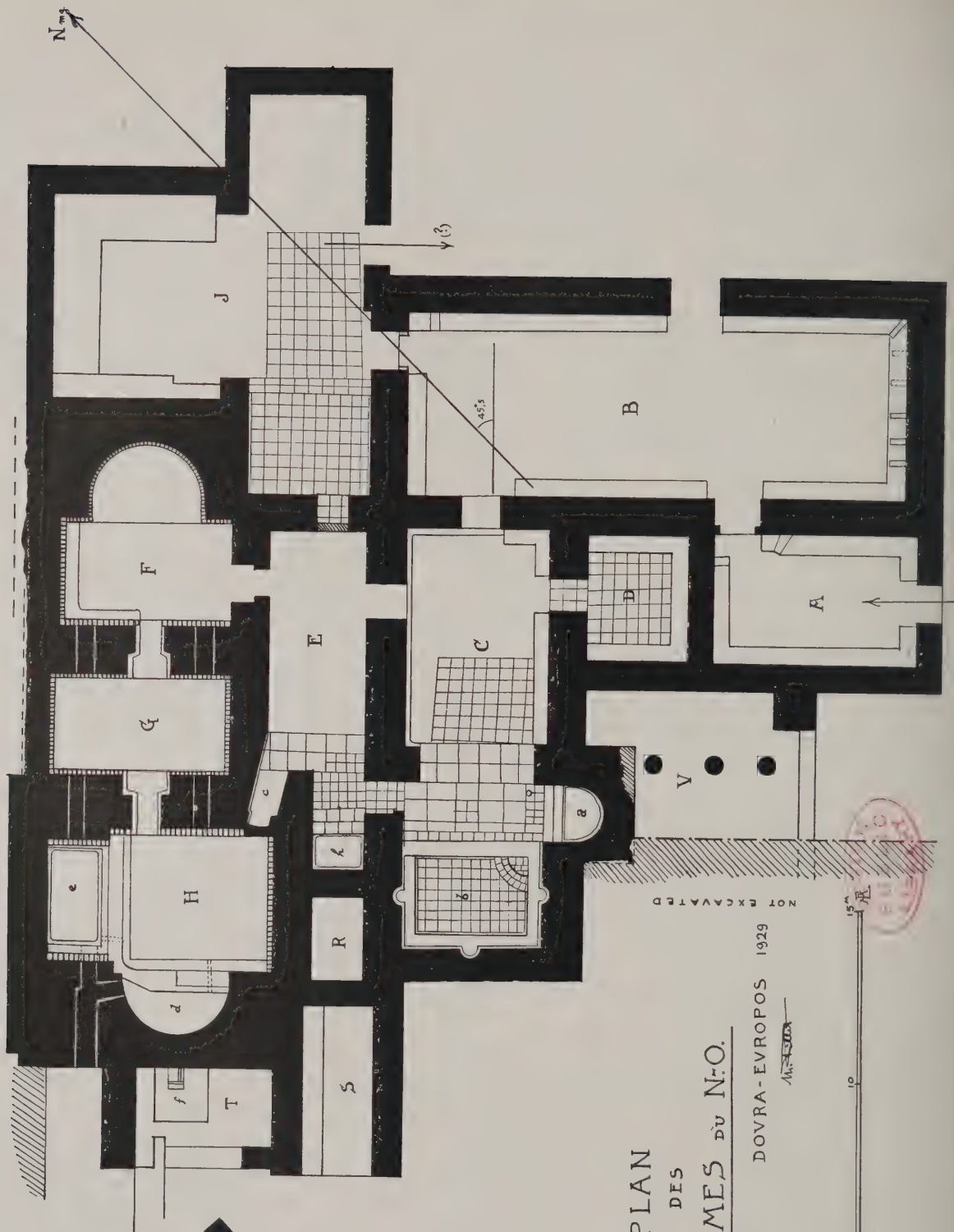
PLAN  
DES  
THERMES DU N<sup>o</sup> O.

DOVRA-EVROPOS 1929

M. PILLET



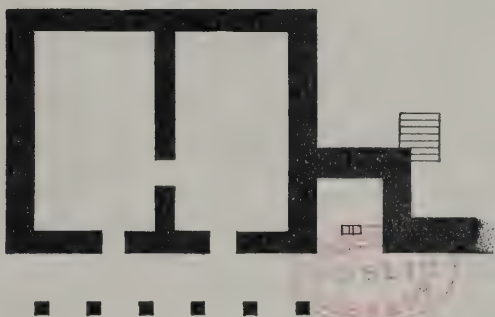
PLAN OF BATHS  
(DRAWN BY M. PILLET)





(DRAWN BY C)





TEMPLE OF  
PALMYRENE GODS

SCALE —



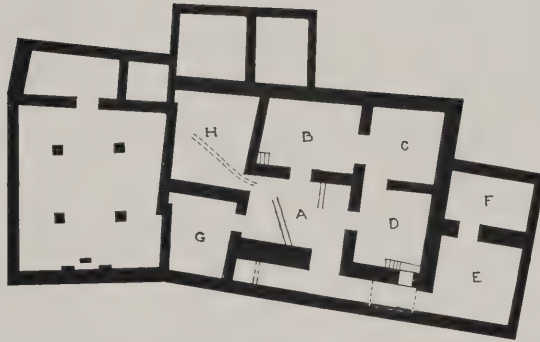
AND TOWER OF THE ARCHERS  
(OPKINS)

AD. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200.

201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300.

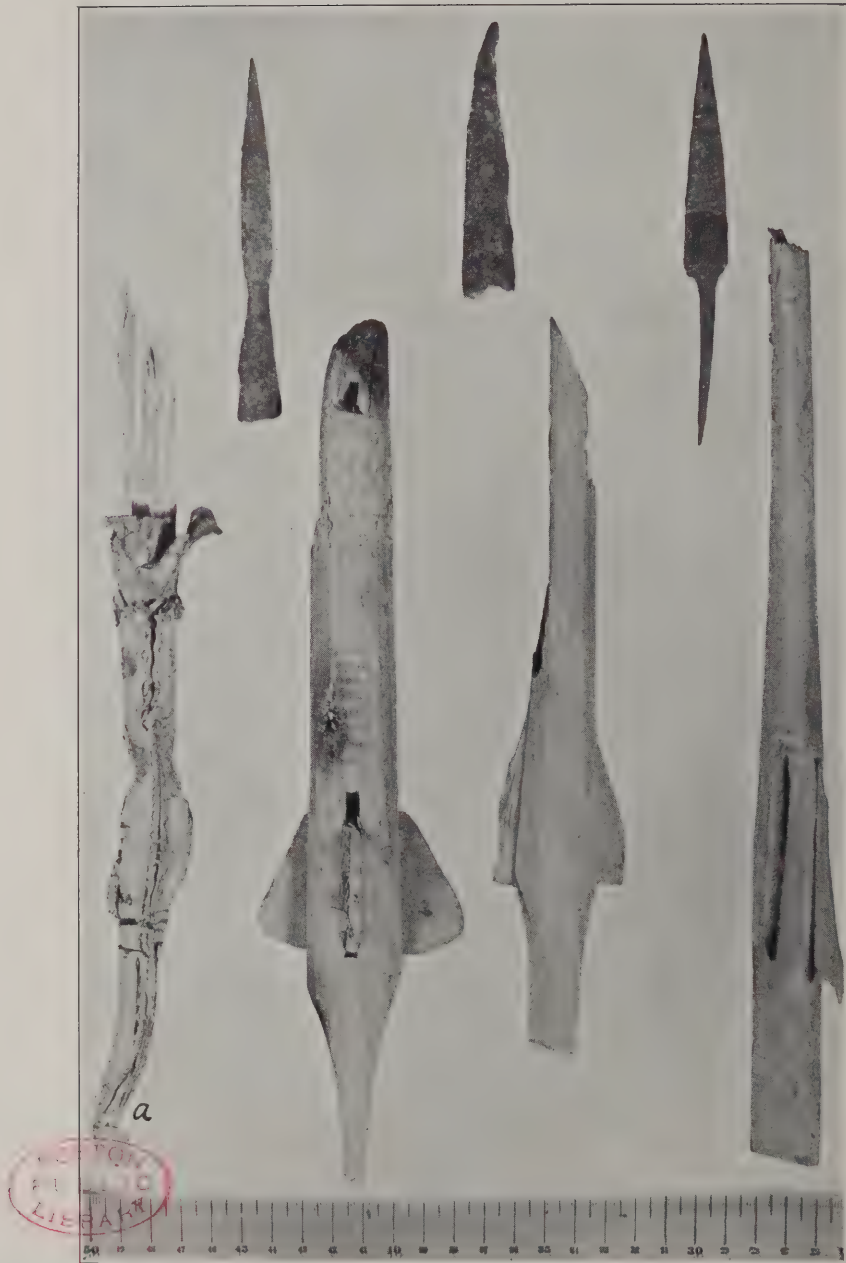
VIII



ROMAN TEMPLE  
AND  
HOUSE PLAN

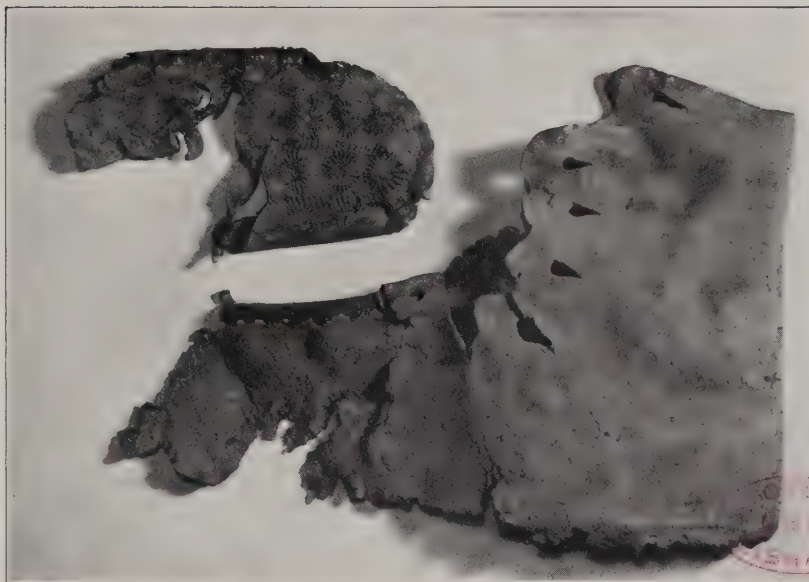
SCALE  
0 1 2 5 10 M

PLAN OF ROMAN TEMPLE AND HOUSE  
(DRAWN BY C. HOPKINS)



ARROWS AND DAGGER CASE

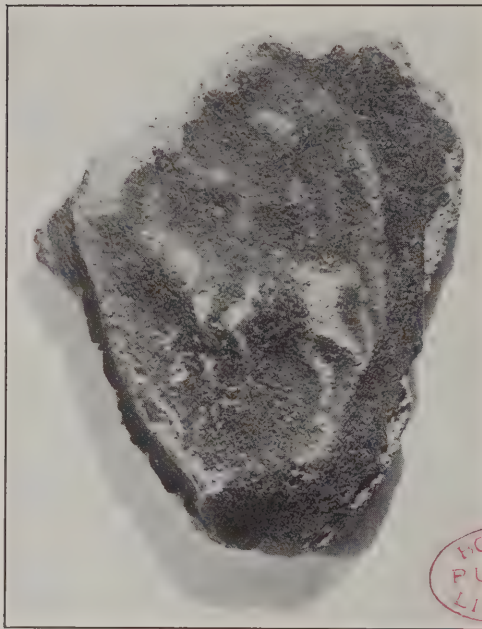




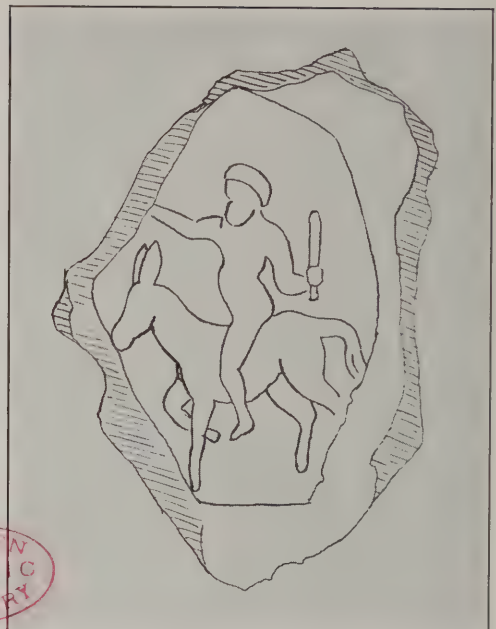
I. SOLDIER'S BOOT AND CHILD'S SANDAL



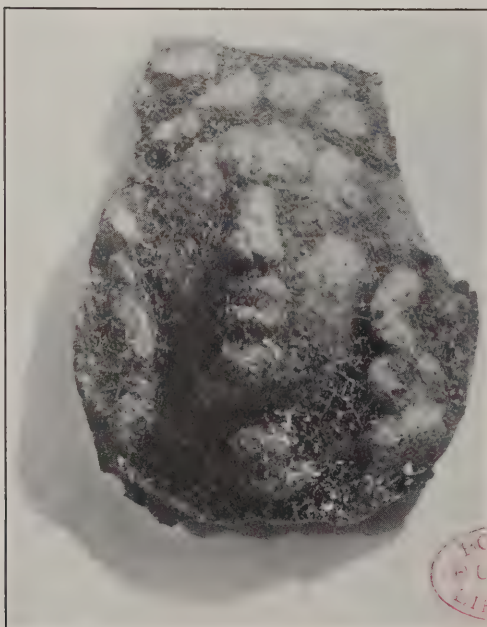
2. CHILD'S PAIR OF SHOES



1



2



3



4

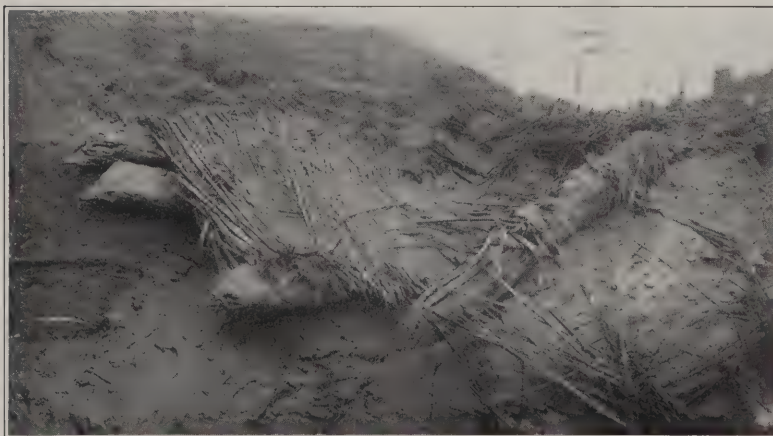
FAÏENCE RELIEFS. 1. SILENUS RIDING ON AN ASS. 2. DRAWING OF SILENUS (NO. 1).  
3. FEMALE HEAD. 4. HEAD (BEARDED?)



I



2



3

PALMYRENE GATE, LEDGES AND FLOOR BEAMS OF SOUTHEAST ROOM  
OF SOUTH TOWER

1 ΑΠΟΛ

2 ΜΑΙ  
ΓΕΛ

3 ΧΥ

4 ΚΕΘ

5 WAKNC

6 ΕΡΑC

7 ANINC

8 Α

9 R

10 Δ

11 Β

12 Λ

13 Φ ||

14 Π

15 ΦΙΡ

16 Θ

17 ΘΜ

18 ΦΚΖ

19 ΧΔ

20 Τ

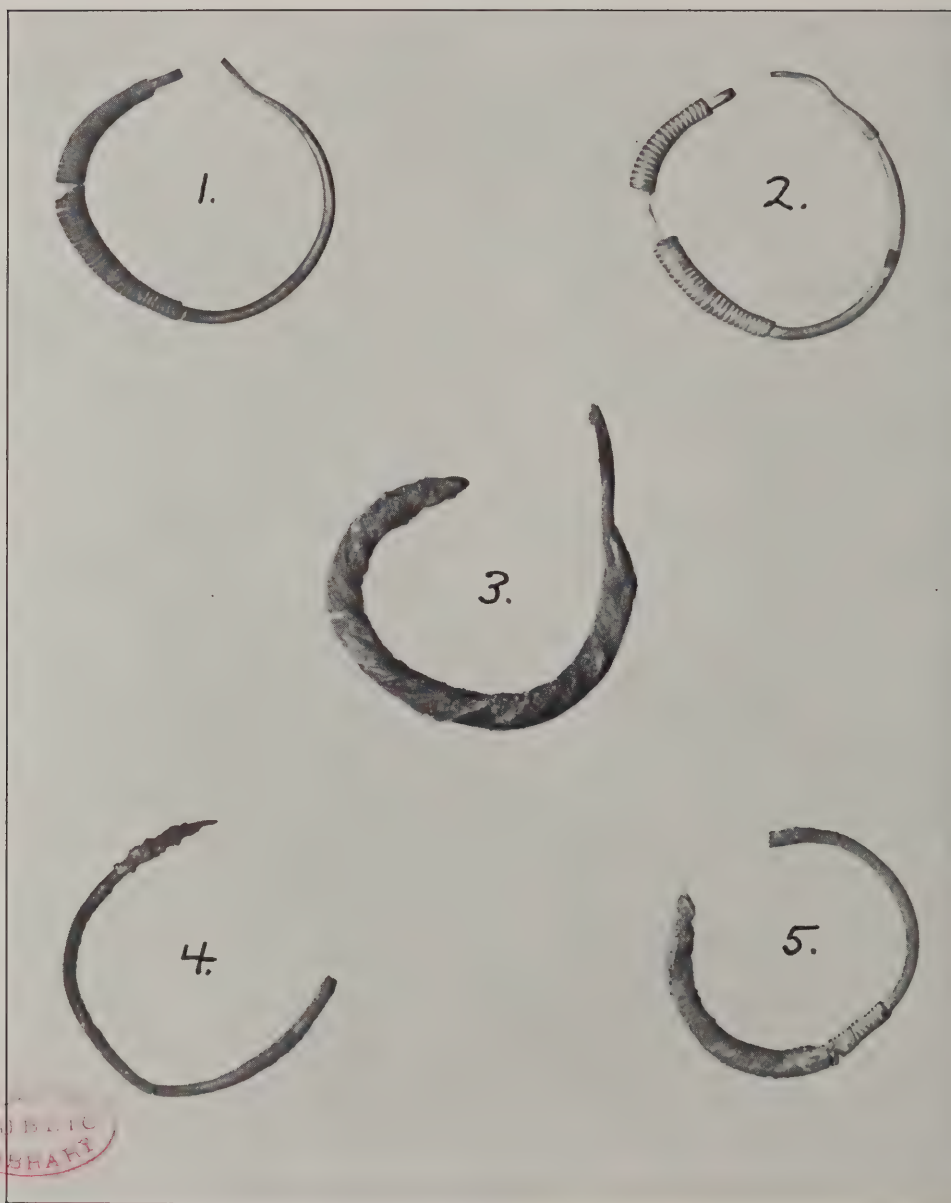
21 ΚΟΤ  
ΝΒ





LARGE STORAGE JAR, RESTORED

ROYAL  
LIBRARY

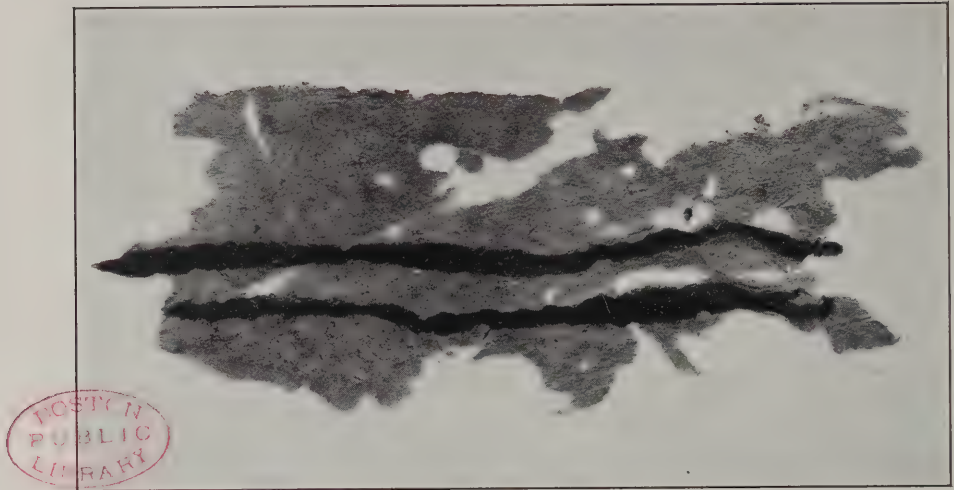


JEWELRY, EARRINGS



WALL OF PASSAGEWAY OF PALMYRENE GATE WITH INSCRIPTIONS





I. PIECE OF FELT

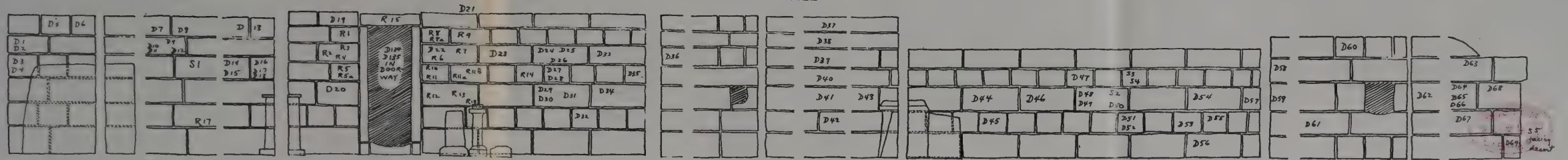


2. WOVEN CLOTH





XVII  
PALMYRA GATE  
SOUTH WALL



NORTH WALL

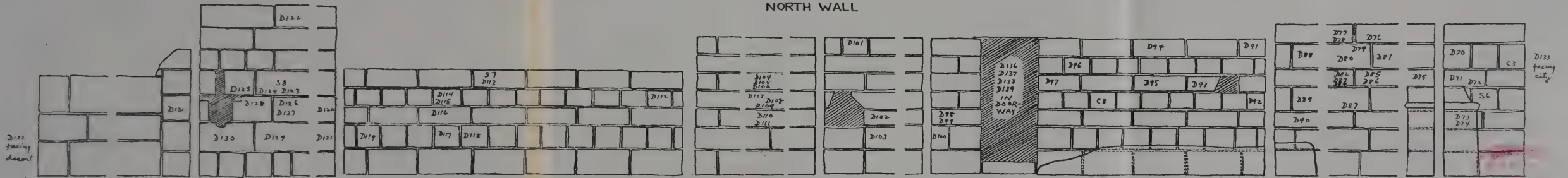
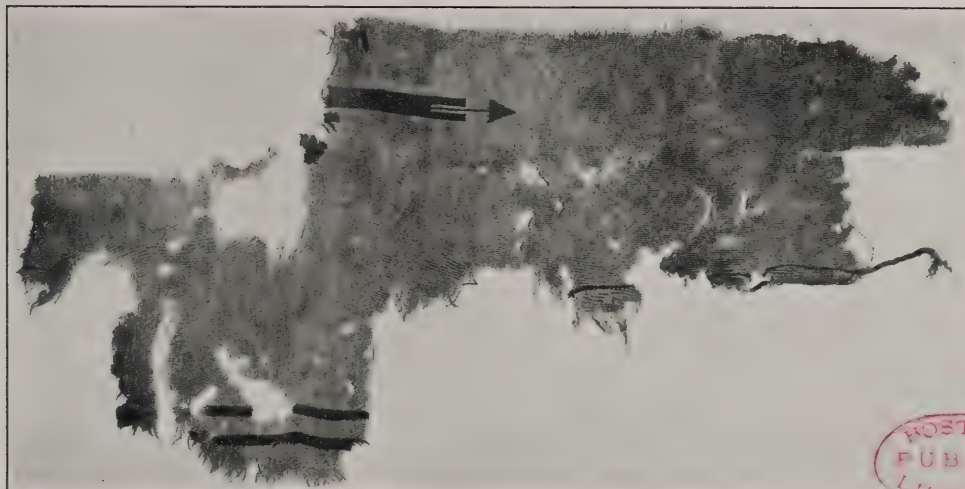
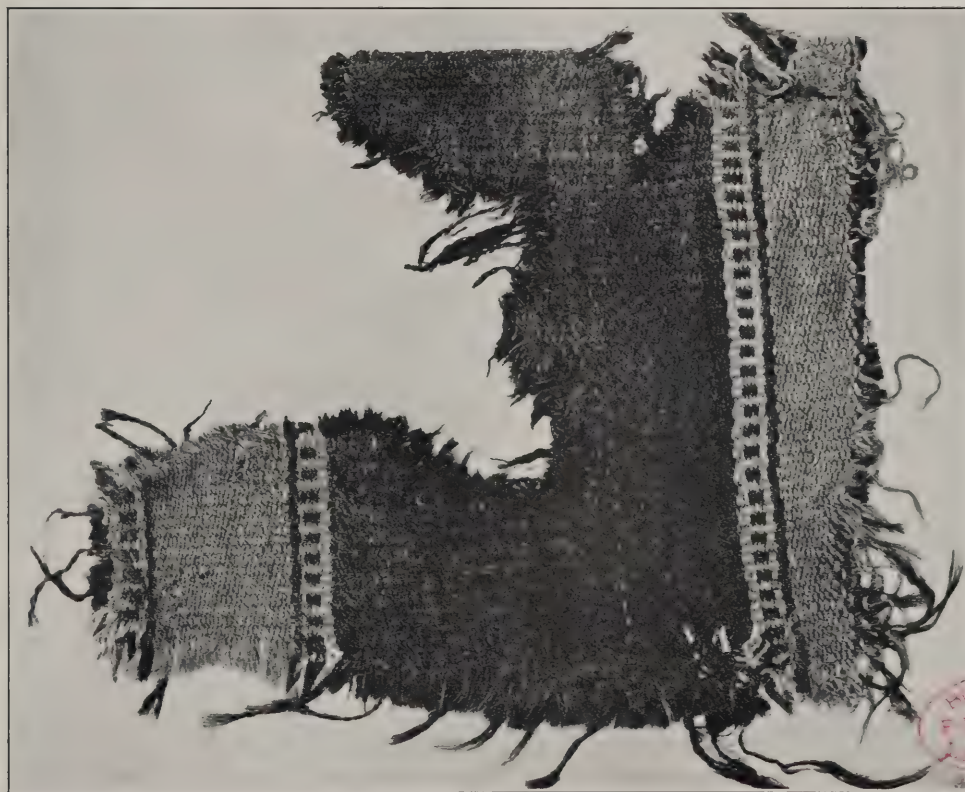


DIAGRAM OF PASSAGEWAY OF PALMYRENE GATE  
(DRAWN BY J. JOHNSON)





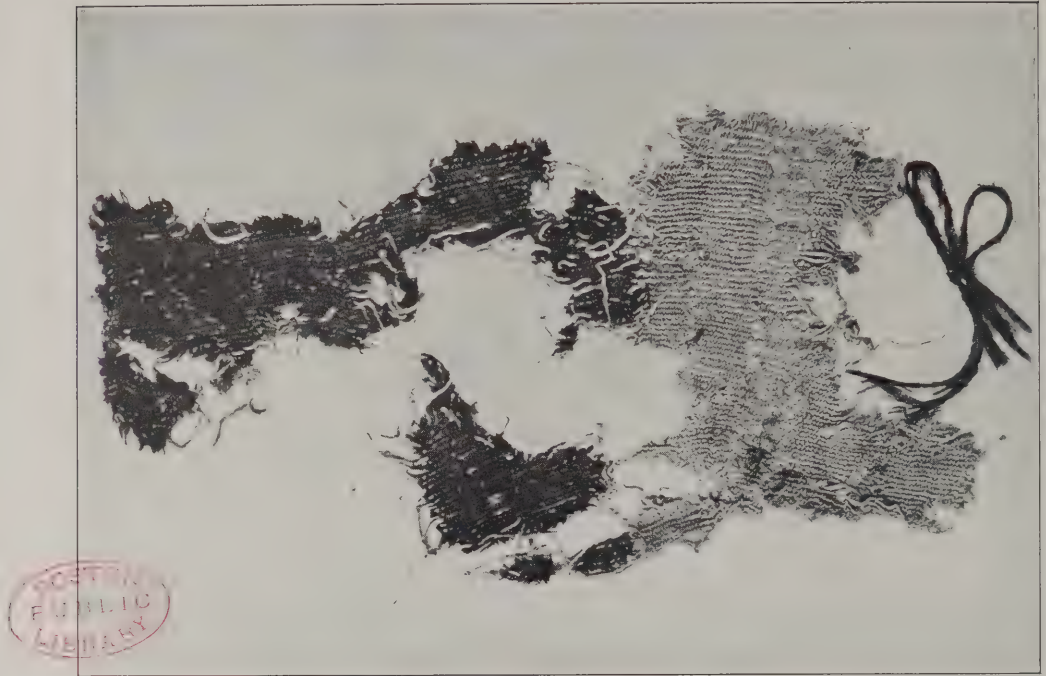
1



2

TYPES OF CLOTH





I



2

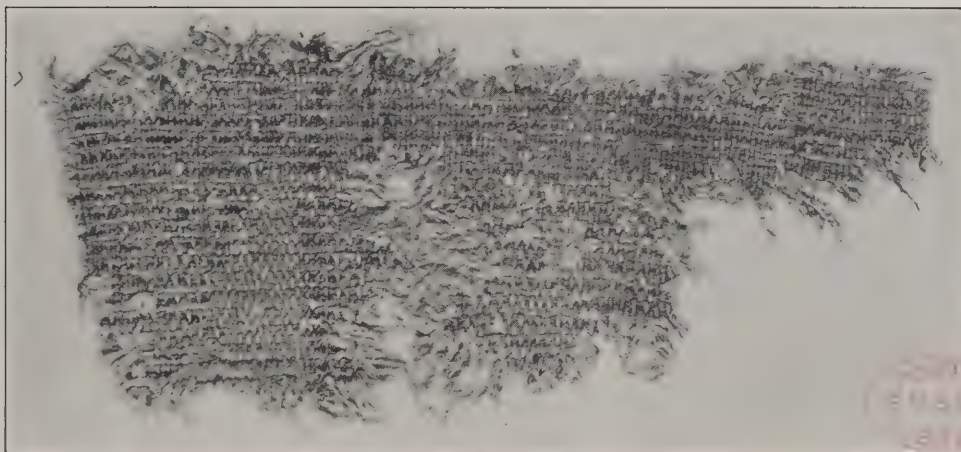
PIECE OF CLOTH, FRONT AND BACK



1



2



3

TYPES OF CLOTH



PAINTED PANELS FROM EGYPT  
BERLIN MUSEUM, EGYPTIAN DEPARTMENT





1



2



3



4

BRONZE HELMET FOUND IN THE JORDAN  
BERLIN ANTIQUARIUM





1



2



3

TERRA COTTA FIGURINES OF PARTHIAN RIDERS. 1-2. SEMITIC MUSEUM,  
HARVARD UNIVERSITY. 3. BERLIN MUSEUM



I



2



3

I-2. TERRA COTTA FIGURINES OF PARTHIAN RIDERS. I. LOUVRE. 2. NICOSIA, CYPRUS.  
3. TERRA COTTA OF RECUMBENT FIGURE. BRITISH MUSEUM



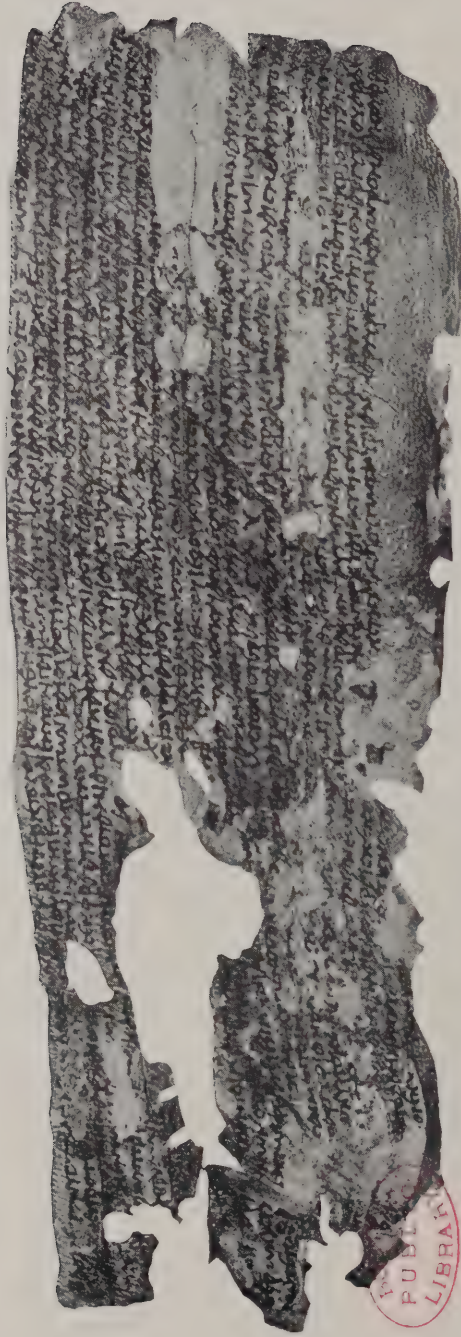
SHIELD, BACK AND FRONT

## XXVII

BOSTON  
PUBLIC  
LIBRARY

## ALPHABET TABLE





PARCHMENT X. A CONTRACT OF LOAN OF 121 A.D.





AÉRIAL PHOTOGRAPH OF DURA, MARCH 29, 1929. EUPHRATES AT TOP, CITADEL IN CENTER

XXX



PLAN OF CITY  
(DRAWN BY C. HOPKINS)





I. CITADEL PALACE, WALL OF EARLIER BUILDING IN  
FOREGROUND



2. PORTICO OF CITADEL PALACE



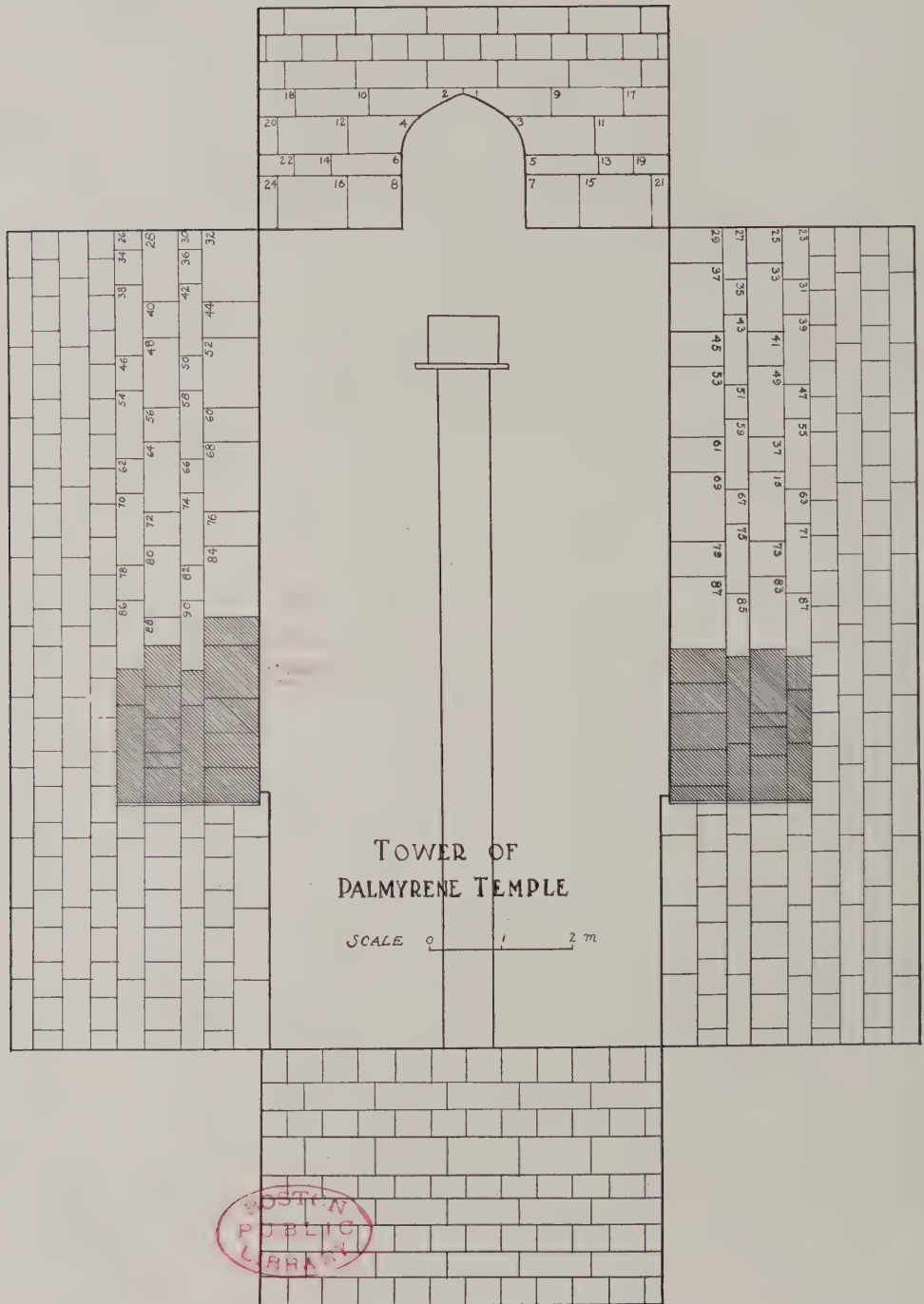


DIAGRAM OF INTERIOR OF TOWER OF PALMYRENE TEMPLE  
(DRAWN BY C. HOPKINS)



1



2

TOWER OF PALMYRENE TEMPLE. 1. DOORWAY FROM WITHIN.

2. SOUTH WALL OF INTERIOR



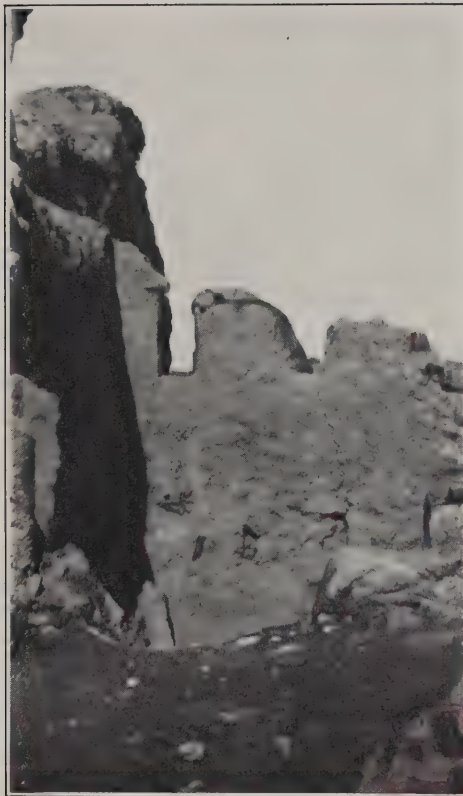
I. ENTRANCE TO NORTHWEST CITADEL  
TOWER FROM WITHIN



2. ENTRANCE TO TOWER OF PALMYRENE  
TEMPLE, SHOWING ALTAR WITHIN



3. TOWER OF ARCHERS, EAST SECTION WITH  
DOORWAY FROM WITHIN



I. CRENELATIONS IN SIDE GATE EAST OF  
TOWER OF ARCHERS

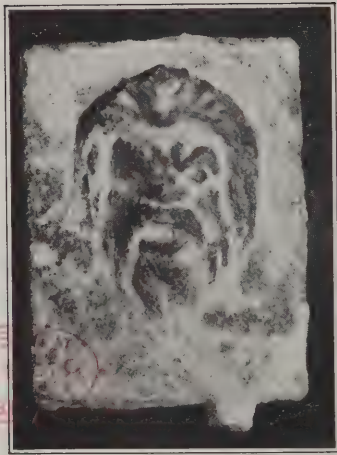


2. TEMPLE OF ROMAN ARCHERS





I. PLASTER FRIEZE FROM ROMAN TEMPLE



2. BRONZE PLAQUE OF MASK  
OF SILENUS



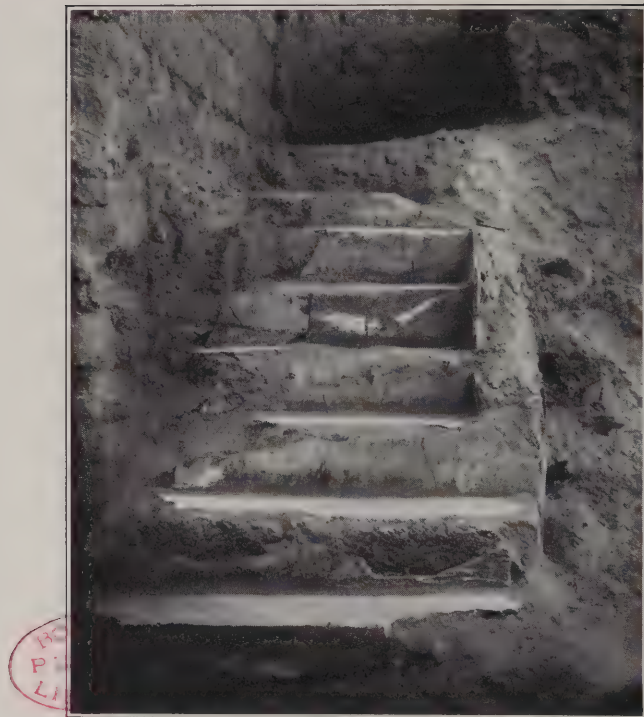
3. ALTAR OF THE SUN



I. ROOMS OF SOUTH TOWER OF PALMYRENE GATE



2. CHARIOT WHEELS



1. STEPS AT FOOT OF NORTH TOWER, PALMYRENE GATE



2. FLOOR LEVELS IN THE NORTHWEST CITADEL TOWER

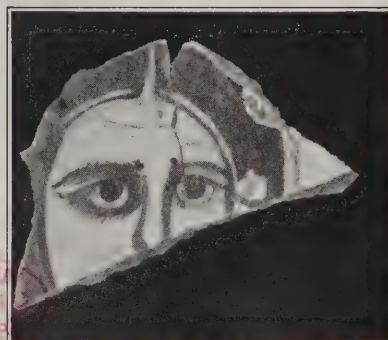




1



2



3

FROM THE BATH. 1. CAST OF MOLD. 2. PLASTER STAMP,  
HORSE AND SWASTIKA. 3. FRESCO HEAD





I

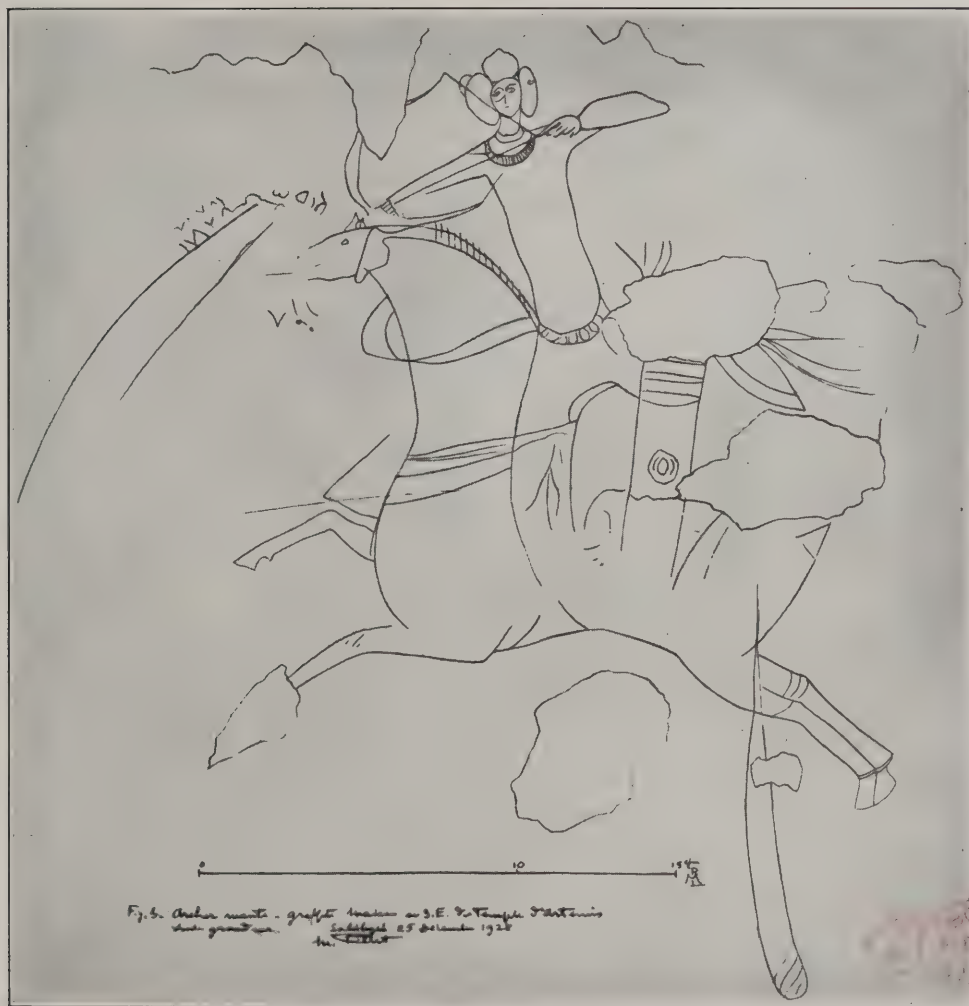


2

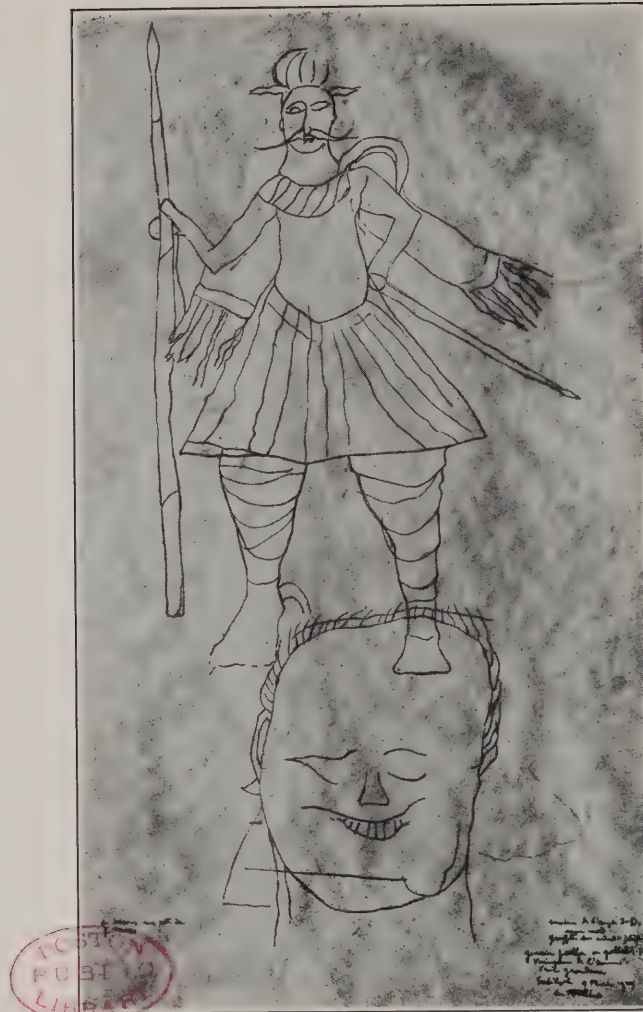
BATH. 1. HEATING PASSAGE BETWEEN FURNACE AND BATH PROPER.  
2. FLOOR AND HOLLOW BRICKS OF APSIDAL LACONICUM



I



2



1



2

GRAFFITI. 1. PARTHIAN FOOT SOLDIER. 2. LION

# XLIII

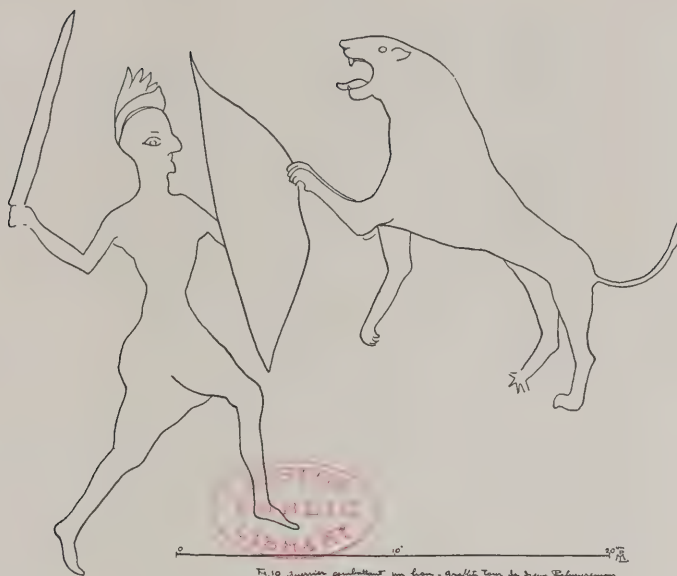
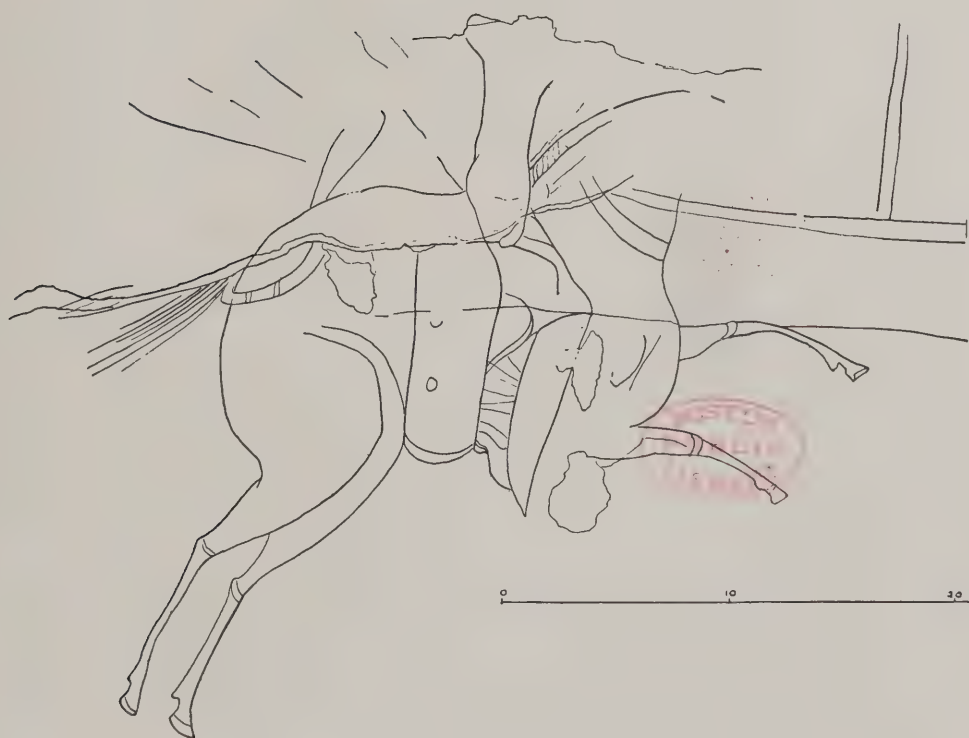


Fig. 10. Joueur de harpe. - Graffiti. - Tombe de la nécropole de la ville de Samarra. - Musée de Samarra. - 13 Mars 1919. - H. 10. 100.

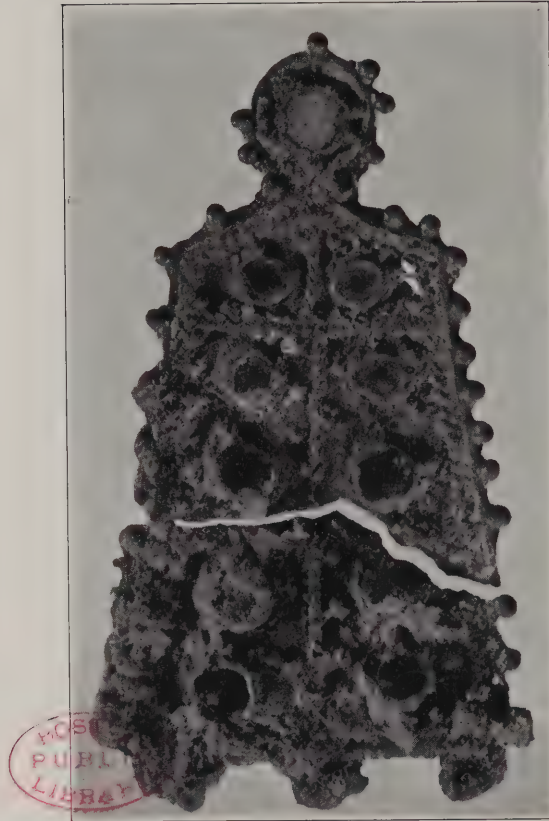
I



2

GRAFFITI. I. MAN ATTACKING LION. 2. PARTHIAN RIDER





1



2

JEWELRY. 1. SILVER FIBULA SET WITH GARNETS. 2. SILVER BRACELETS



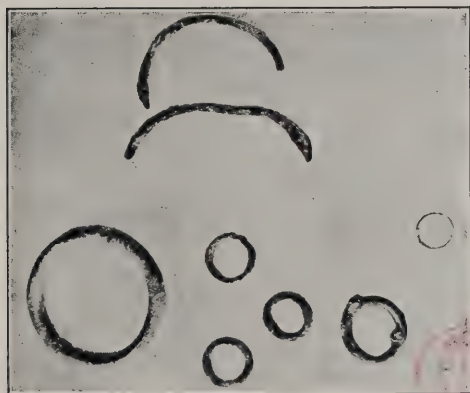
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5

JEWELRY. 1. SILVER BRACELET WITH GEM ON CLASP. 2. SILVER EARRING WITH  
CRESCENT PENDANT. 3. HORSESHOE PENDANT. 4. BRACELETS AND RINGS  
FROM VARIOUS PARTS OF THE CITY. 5. SILVER EARRING



I



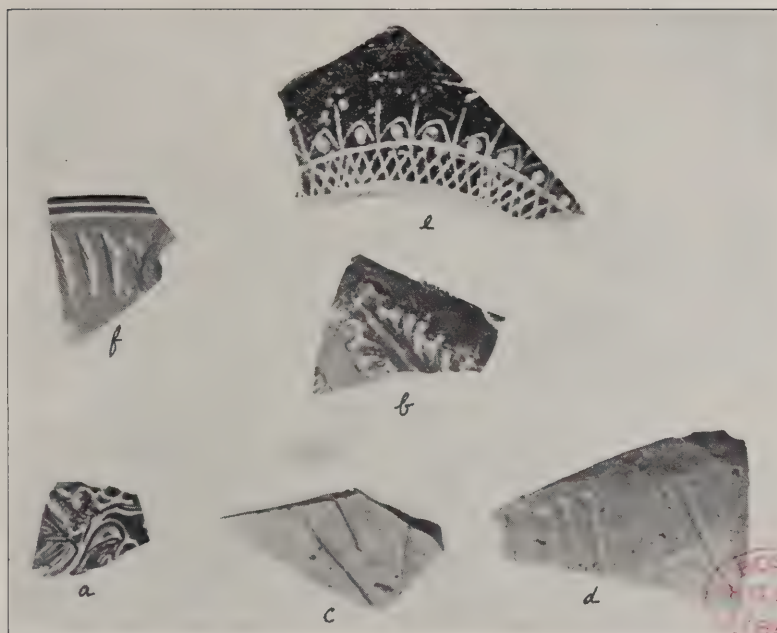
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3

JEWELRY. I. SILVER EARRINGS. 2-3. SILVER BRACELET WITH BUTTON TO CONCEAL CLASP,  
TWO VIEWS

XLVII



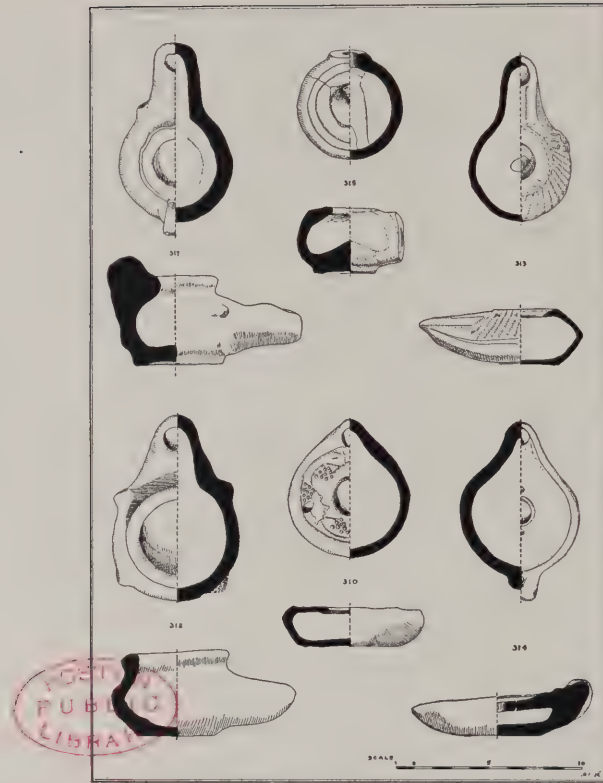
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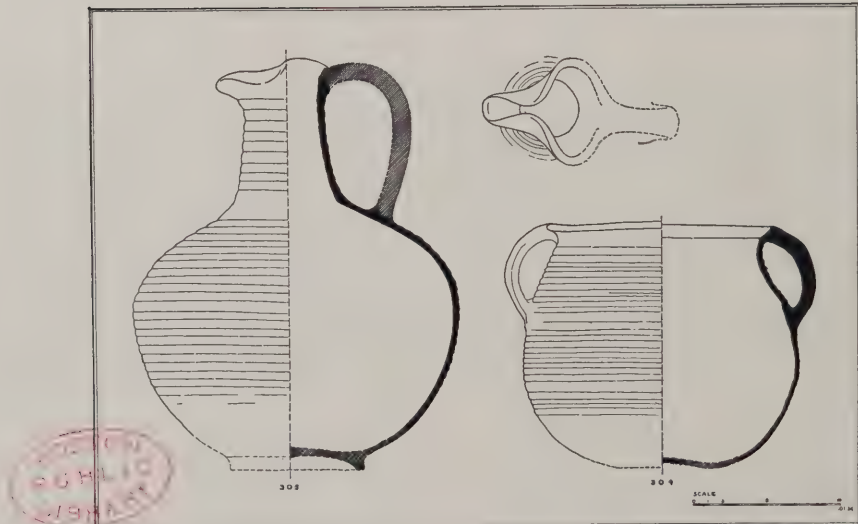
2

POTTERY. 1. FRAGMENTS OF INCISED AND RELIEF WARE. 2. FRAGMENTS OF STAMPED WARE

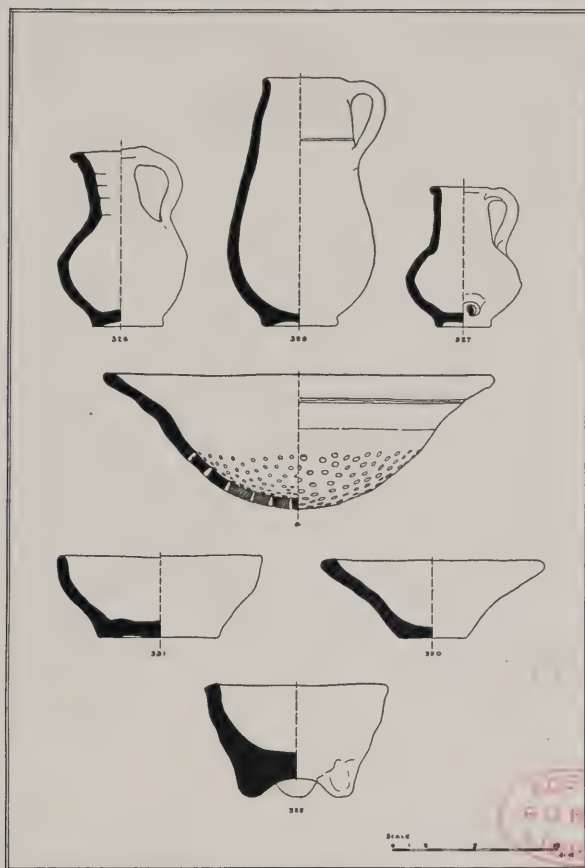




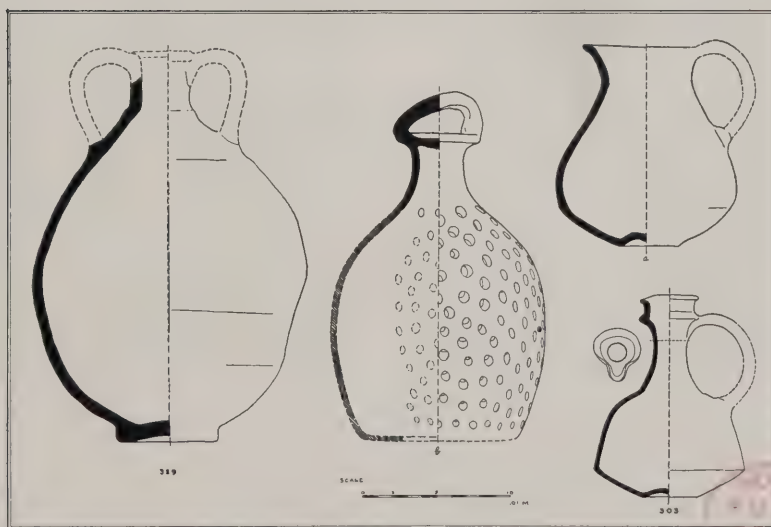
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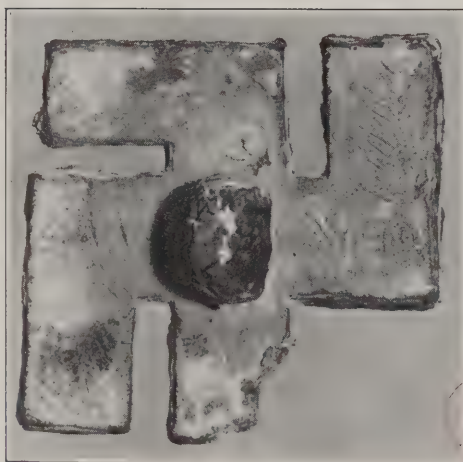
2

POTTERY. 1. EXAMPLES OF YELLOW WARE. 2. EXAMPLES OF YELLOW WARE AND BRITTLE WARE

L



I. FAÏENCE VESSEL

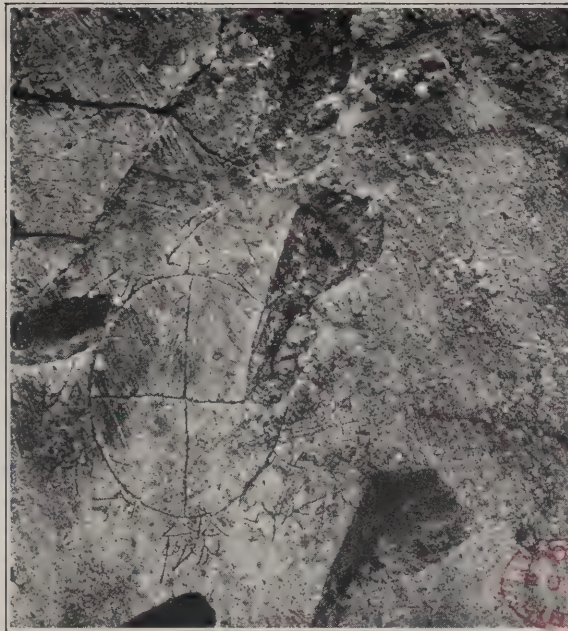


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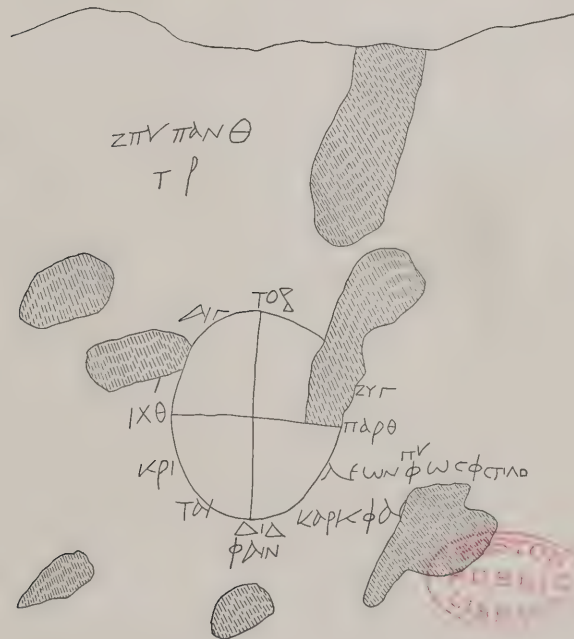


3

BRONZE SWASTIKA. 2. TOP. 3. BOTTOM



1



2

HOROSCOPE FROM PRIVATE HOUSE. 1. PHOTOGRAPH.  
2. FACSIMILE



| Palm. | Syr. | Nab. | Arab. |
|-------|------|------|-------|
| Ⲡ     | ܰ    | 𐤀    | ا     |
| ⲡ     | ܰ    | 𐤁    | ب     |
| Ⲣ     | ܰ    | 𐤂    | پ     |
| ⲣ     | ܰ    | 𐤃    | ر     |
| Ⲥ     | ܰ    | 𐤄    | ز     |
| ⲥ     | ܰ    | 𐤅    | ح     |
| Ⲧ     | ܰ    | 𐤆    | خ     |
| ⲧ     | ܰ    | 𐤇    | د     |
| Ⲩ     | ܰ    | 𐤈    | ذ     |
| ⲩ     | ܰ    | 𐤉    | ر     |
| Ⲫ     | ܰ    | 𐤊    | ز     |
| ⲫ     | ܰ    | 𐤋    | ح     |
| Ⲭ     | ܰ    | 𐤌    | خ     |
| ⲭ     | ܰ    | 𐤍    | د     |
| Ⲯ     | ܰ    | 𐤎    | ذ     |



SEMITIC LETTER FORMS. TABLE I

Heb. Sab. Safaitic      Heb. Eth.      Safaitic

|   |   |     |  |   |         |       |
|---|---|-----|--|---|---------|-------|
| ר | ⊕ | ⊕ ⊖ |  | ⌵ | ח       | ⌵ ⌶   |
| ר | ⊖ | ⊖ ⌵ |  | ⌶ | ⌶       | ⊕ ⊕   |
| ח | ⌵ | ⌵   |  | ⌶ | ⌶ ⌶     | ⌶ ⌶ ⌶ |
| ח | ⊖ | ⊖   |  | ⌵ | ⌵ ⌶ > - |       |
| ר | ⌵ | ⌵ ⌶ |  | ⌵ | ⌵       | ⌵     |
| ⌵ | ⌵ | ⌵   |  | ⌵ | ⌵       | ⌵ ⌵   |

SEMITIC LETTER FORMS. TABLE II



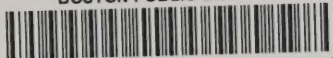








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